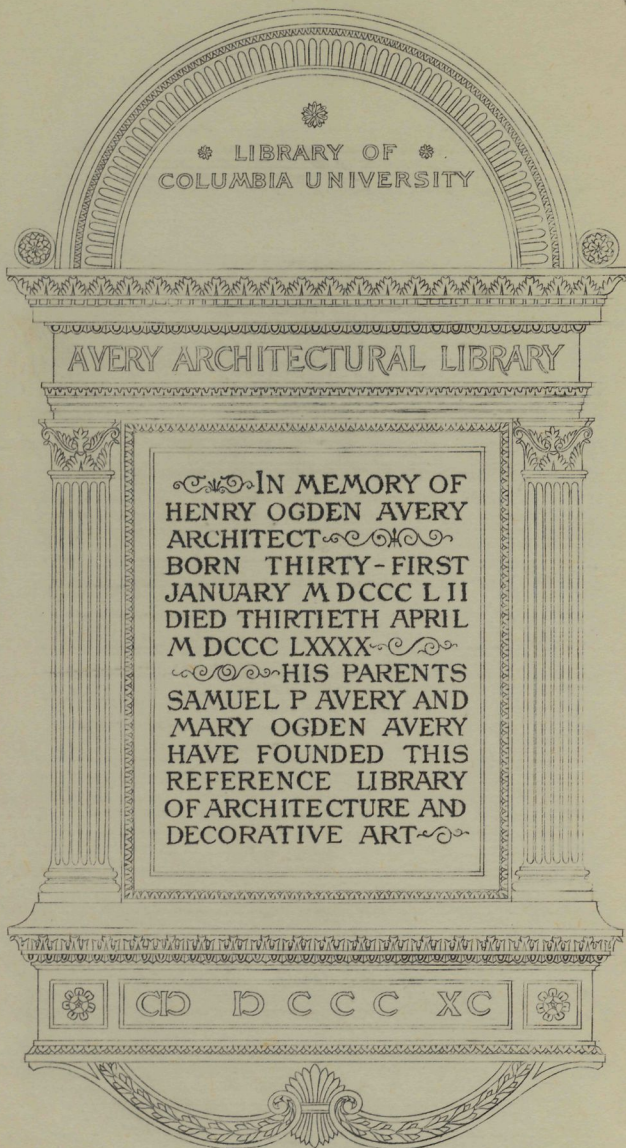


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BY
THOMAS DINHAM ATKINSON
ARCHITECT

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TO
MY MOTHER

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PREFACE

THIS little book is limited to the historical aspect of Architecture, and only deals incidentally with words used in art and art criticism and in building. But at the same time many technical terms are to be found, and constructional terms in particular; for construction lies at the very root of the matter.

More attention than is usual in books of this kind is devoted to that part of the subject which bears on social and religious life. Thus more space is given to houses and churches and proportionately less to purely architectural terms such as capitals and vaults.

Definitions are in most cases unnecessary; they are sometimes given, as in ARCH, because it is interesting to work out a definition; and this particular instance, by the by, illustrates the importance I attach to construction. Derivations are given where they are illuminating or curious. When there has been a choice the most familiar word or form of word has generally been adopted without much regard to philology on the one hand or to medieval use or monkish slang on the other.

Many terms used in Greek and Roman architecture are included because they are necessary to a proper understanding of Renaissance architecture and church-building. For this reason the general principle has been to include those terms which have a direct bearing on English architecture, whether they deal with decorative forms or with the planning of buildings.

Thus the Orders and Basilicas are described, but not Roman baths. A few other words of this class are included on account of their intrinsic interest and because they are omitted from many books.

It is hardly necessary to say that I am deeply indebted to the published works of others. I have briefly but I trust sufficiently acknowledged this in each case. Where I am more peculiarly indebted to any one work I have made a fuller acknowledgment at the end of the article.

I have to thank the following gentlemen for lending, or for giving me permission to copy, illustrations: Messrs. Batsford, Messrs. A. and C. Black, J. W. Clark, M.A., F.S.A., W. M. Fawcett, M.A., F.S.A., W. H. St. John Hope, M.A., Mr. J. T. Micklethwaite, F.S.A., Mr. William Poel, E. S. Prior, M.A., F.S.A., Mr. Quaritch, the Right Reverend the Lord Bishop of Winchester, the Presidents and Councils of the Alcuin Club, of the Society of Antiquaries of London, of the Cambridge Antiquarian Society, of the Royal Archæological Institute, of the Hellenic Society, of the Yorkshire Archæological Society and the Syndics of the Cambridge University Press. Where no statement to the contrary is made the illustrations are from drawings old and new made by myself.

I have to thank my father for the use of an unpublished paper on the development of the English play-house. To several other friends I am very grateful for their kindness in reading proofs and in making valuable suggestions and criticisms.

T. D. A.

CAMBRIDGE, *July*, 1906

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FIG.

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work is of brick (*see* fig. 133). The drawbridge has been replaced by a permanent raised causeway. The walls of the keep act as 'retaining walls' to a mound of earth. The ditch surrounding the keep (fig. 50) and the bank dividing the court are conjectural.

The general outline is taken, by the kind permission of the Lord Bishop of Winchester, from a rough plan preserved in the Castle, showing the buildings approximately in their present state. For details and conjectural restorations the author is responsible

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EXPLANATION OF REFERENCES

D ¹ = West door and Galilee Porch	BA=Chapel of Bishop Alcock
D ² = Bishop's door	BW=Chapel of Bp. West
D ³ =Door to church of St. Cross	C=Chapel
D ⁴ =Door from W. part of cloister to the nave, called the Prior's Door	ME=Monks' entrance to Lady Chapel
D ⁵ =Door from the E. part of cloister to the choir	PE=Prior's entrance to Lady Chapel
D ⁶ =Door from cloister transept	GPE=Gallery to PE
D ⁷ =Door from transept to the passage leading from the cloister to the cemetery. (<i>See</i> SCC below)	V=Vestry
T=Part of W. transept destroyed or not finished	SCC=St. Catherine's chapel, formerly passage from cloister to monks' cemetery
D ⁸ =Door from Presbytery to Lady Chapel. The passage had rooms over it	A=Armarium
P=Pulpitum	L=Lavatory
NA=Nave altar	CH=Prior's chapel
CA=Choir altar	ST=Prior's study
HA=High altar	PR=Parlour attached to the Great Hall
RA=Relics altar	BY=Buttery of Great Hall
"ATA"="Ad Tria Altaria"	CL=Cellarer's lodging
BVM=Old chapel of the Blessed Virgin	DC="Dark Cloister" leading from great cloister to Infirmary; with Singing School over
SE=Shrine and altar of St. Etheldreda	S=Stairs to Dormitory
	Necess ^m =Necessarium
	SS=Stairs to Fair Hall
	A CH=Almonry chapel on upper floor with seven shops below

The foundations of the original east apse are shown in outline.

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Diagram plan reduced from a large detailed plan
by Mr. W. H. St. John Hope in *The Yorkshire
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EXPLANATION OF REFERENCES

RA = Rood altar	B = Book closet
BVM = Chapel of Our Lady	P = Parlour (next to chapter-house)
SB = Chapel of St. Bernard	P = Pulpit (in refectory)
C = Chapel	WH = Warming-house
S = Sacristy	Yd = Yard
SC = Sacrist's Checker	Necess ^{um} = Necessarium
XX = Form of original east end	OP = Outer parlour
	Bu = Buttery

The foundations of the original east end are shown in outline.

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A GLOSSARY OF ENGLISH ARCHITECTURE

ABACUS (*pl.* ABACI). Lit. a table, a slab; in architecture the top member of a capital.* In Greek Doric it is square in plan and has square edges (fig. 36); in Greek Ionic and in Roman Doric and Tuscan it is square in plan and the lower edge is moulded; in the remaining



FIG. 1. ABACUS OF CORINTHIAN
CAPITAL



FIG. 2. NORMAN
ABACUS



FIG. 3. GOTHIC
ABACUS

orders* it has concave sides and the angles are cut off, the face is moulded and sometimes enriched (fig. 1). The Norman abacus (fig. 2) is always square in plan in small capitals and generally in large capitals; the upper edge is square and the lower edge chamfered. In Gothic work it is round on plan and has mouldings.*

ABBEY. A monastery* ruled over by an abbot (lit. a father) or abbess. (*See also* PRIORY.)

ABUTMENT. A mass of masonry or other material to resist a thrust such as that of an arch.

* See article thereon.

ACANTHUS. The leaf of the Corinthian capital (figs. 4, 5) copied, according to Vitruvius, from the variety of thistle found in Greece. Called in English 'Bear's-breech' (P.).



FIG. 4. GREEK ACANTHUS



FIG. 5. ROMAN ACANTHUS

ACROPOLIS. The citadel of a Greek city, usually a naturally defensive position, rendered stronger by works; on it were placed the principal buildings.

ACOUSTIC JAR. *See* RESONATOR.

ACROTERION (*pl.* ACROTERIA). A pedestal for a figure on the apex and at the lower angles of a Greek or Roman pediment (fig. 6).

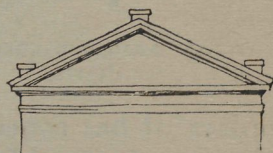


FIG. 6. ACROTERIA

AISLE. A wing of building separated from the nave by a row of columns.

ALABASTER. A soft, slightly translucent, white and pink limestone (sulphate of lime) used for sculpture and for conversion (by burning) into Plaster of Paris (gypsum).

ALCOVE. A semi-circular or semi-elliptical recess in a wall. A building of the form of an alcove or apse, erected over the grave of a saint or martyr near Rome in early Christian days.

ALLEY. A narrow lane in a town. An enclosed walk in a garden. A narrow part of a building, such as an aisle or cloister.

ALLURE. The walk along the top of a castle wall.

ALMERY, AUMBRY. A cupboard in the thickness of a wall (medieval). Besides those of ordinary size, a church sometimes has a very high one (generally near the west end) to contain a processional cross.

ALMONRY. A place in which alms were distributed, e.g. the place in a religious house in which food was given to the indigent.

ALTAR. In Greek and Roman buildings a stone pedestal-like table for sacrifices; in Christian churches a table for the celebration of the Sacrament of the Holy Eucharist.

Christian altars in the earliest times were generally of wood, but in A.D. 509 it was ordered that they were to be of stone (P.). The top was often if not always a single slab of stone or marble, and was supported on walls of masonry or on columns. The altar was generally raised on one or more steps; there seems to have been no rule as to the number. The masonry was in most cases hidden by a frontal of drapery and was covered by a white linen cloth. It seems that the shelf now placed at the back of the Holy Table and generally called a super-altar or retable, was not used in the middle ages.

“From the time that Stone Altars were introduced, it was usual to enclose the relics of saints in them, so that in many cases they were the actual tombs of saints, and they were always supposed to be so, some relics being considered indispensable” (P.). There were sometimes small niches in the end, in which to place the cruets (H.). The slab was marked with five small crosses, one

in the centre and one at each angle, cut in the stone at the places anointed by the bishop at the consecration.

The number of altars in a church depended upon circumstances; even the smallest churches appear to have had two besides the high altar, and the piscinas belonging to them may generally be seen at the east end of each aisle. A large parish church seems usually to have had five altars (M.), while a cathedral church had many more. Saint Gregory, so early as 590, mentions a church with thirteen altars (P.). There was often an altar in the sacristy or vestry, and in early times in the porch.

The destruction of altars by the Reformers appears to have begun in 1548, and an order for the removal of those that remained and for providing 'an honest table' was issued in 1550. The stone altars were restored by Queen Mary, and again removed under Queen Elizabeth. It was then ordered that a table should be set in the place of the altar "and so to stand, saving when the communion of the sacrament is to be distributed; at which time the same shall be so placed in good sort within the chancel as whereby the minister may be more conveniently heard of the communicants in his prayer and ministration, and the communicants also more conveniently and in more number communicate with the said minister." It is thought that the result of this order was that the table was brought from the east end and placed lengthwise down the centre of the chancel. Many good plain tables of this period and of the times of the Stuarts still remain, though very many have been destroyed in the last few years during the 'restoration' of the churches.

SUPER-ALTAR OR PORTABLE ALTAR. A tablet about twelve inches by six, used for the consecration of the elements in places where there was no fixed altar. A

licence from the Pope seems to have been necessary to entitle any to the use of a portable altar (P.).

For the modern use of the term super-altar, see ALTAR, above.

ALTAR-CLOTH. A cloth of white linen placed upon an altar.

ALTAR-FRONTAL. An ornamental cloth of velvet, silk or other rich material hung in front of an altar.

FRONTLET. A short frontal hung from the edge of the altar over the frontal.

ALTAR-PIECE. *See* REREDOS.

ALTAR-TOMB. A modern term for a tomb or monument resembling an altar in form and height; formerly called a 'high-tomb.'

ALTO-RELIEVO. *See* RELIEVO.

AMBO. A stone or marble lectern of pulpit-like form in early churches. There were two—one on the north side for the epistle, and one on the south for the gospel.

AMBULATORY. A path: a place in which to walk, such as a cloister or an aisle; sometimes more particularly applied to an aisle round an apse.

AMPHIPROSTYLE. *See* TEMPLE.

AMPHITHEATRE. A double theatre. A simple theatre is semi-circular with the arena on the chord; an amphitheatre is elliptical with the arena in the middle. Used by the Romans for gladiatorial fights and so forth.

ANCONE. *See* CONSOLE.

ANDIRON. A fire-dog.

ANGLO-SAXON ARCHITECTURE. *See* SAXON ARCHITECTURE.

ANNULET. A ring, e.g. one of the fillets under the Greek Doric capital; a moulded band round a Norman column (fig. 7) or connecting a group of shafts in Gothic architecture. (*See also* MOULDING.)

ANTA (*pl.* ANTAE). A short wall enclosing or partly enclosing the end of a portico; a pilaster projecting from the end wall of the building behind the angle column of the portico. (*See also* TEMPLE.)

ANTE-CHAPEL. The western part of a chapel, separated from the rest by a screen, and often not consecrated.

ANTEFIX. A marble or terra-cotta ornament placed on the top of the cornice along the side of a Greek building, opposite the joint between two rows of tiles.

APOPHYGE. A slight expansion at the top and bottom of Greek and Roman columns (fig. 8). Not used in Greek Doric.

APSE, APSIS. A semi-circular or polygonal wing of a building. Much used in Roman buildings and at one or both ends of early Christian churches* in which it was of semi-circular form, and in Gothic churches on the Continent, in which it is more often polygonal.

* See article thereon.

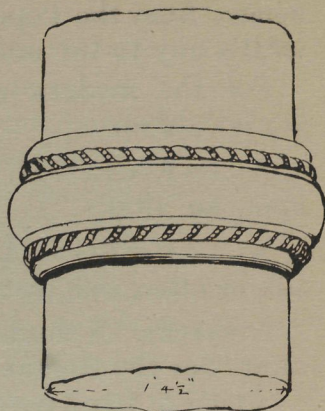


FIG. 7. ANNULET
ST. PETER'S, NORTHAMPTON

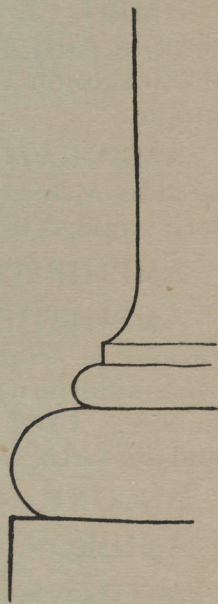


FIG. 8. APOPHYGE

ARABESQUE. A decorative scroll carved in low relief or painted; so called after a somewhat similar form of ornament in Arabian architecture. Though the ornament is much used in all styles the term is generally applied only to Classical and Renaissance architecture (fig. 9).

ARÆOSTYLE. *See* TEMPLE.

ARÆOSYSTYLE. *See* TEMPLE.

ARCADE. A row of arches.

ARCH (Lat. *arcus*, a bow). A structure consisting of several wedge-shaped pieces so arranged as to be supported by their mutual pressure without the aid of a cementing material. This definition limits the term to a system of construction and disregards the form. The term is often applied to a structure which is an arch in form only, as a single stone (fig. 10) or a mass of concrete shaped like an arch, but such are essentially lintels in their function. Another arched form which does not fall within the definition given above is the dome over the Treasury of Atreus



FIG. 10.
AN ARCH IN
FORM ONLY



FIG. 9. ARABESQUE

(fig. 11), which is really a system of corbelling.

The Orientals have a saying that 'the arch never rests'; this agrees with what has been said above, for it follows as a corollary to our definition that the true arch always exerts an outward pressure on its supports.

Voussoirs are the stones or bricks which go to make up an arch. The upper or outer surface of an arch is called the extrados, as distinguished from the inner or

lower surface which is called the intrados or soffit. The haunch is the part between the springing and the apex, more particularly (in common speech) the portion about half-way between. In a rough brick arch in which the bricks are not wedge-shaped, the mortar in each joint assumes the form of a wedge and acts as a 'voussoir.'

The arch was known to the Greeks but hardly ever used by them. The Romans employed the arch or the arched form extensively, always for constructive reasons, never for decoration; many of their arches and vaults are such in form only, being really masses of concrete; the form is always semi-circular.

Both round and pointed arches with radiating joints were used in the East in remote times: in Assyria and in Ethiopia and elsewhere centuries before the Christian era. It is possible that the pointed arch is the earliest form, for it seems not unlikely that the primitive construction consisted of corbelling in horizontal courses, as in the Treasury of Atreus (fig. 11),

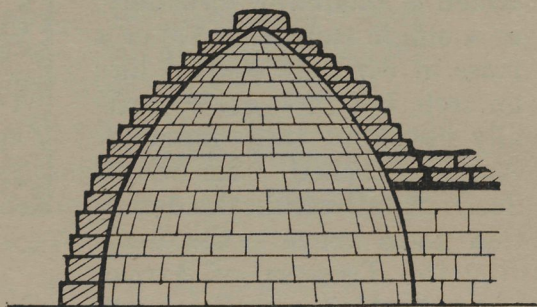


FIG. II. AN ARCH IN FORM ONLY
TREASURY OF ATREUS

and an arch or dome of this construction would be more easily brought to a pointed apex than to a semi-circle.¹ However that may be, the pointed form and the true arch-construction with radiating voussoirs

¹ I owe this suggestion to my Father.

continued in use and is found in various lands and of various centuries of the Christian era. It was used by the Mahometans and was probably introduced by them into Sicily and other countries which they conquered in the eighth and ninth centuries; it is found in Spain in the ninth and tenth centuries. In the south of France it was used early in the eleventh century, but not in the north of France for at least a hundred years later, and it was not brought over to England till about 1150. Many other theories, which it is unnecessary to notice here, have been put forward to account for the invention of the pointed arch. Its adoption when once introduced was no doubt due, in great part, to the facilities it gave in the construction of groined vaults.

Ogee arches (fig. 13 K), also probably of Oriental origin, were used in England from the second quarter of the fourteenth century.

Arches struck from four centres (fig. 13 H) are found in English work of between 1350 and 1370 onwards; after 1500 they became very flat, especially in narrow spans such as doorways. On the introduction of Renaissance architecture about 1550, the round arch gradually superseded the pointed. Elliptical arches were used a good deal in the latter part of the eighteenth century (fig. 13 I J).

RELIEVING ARCH. A plain arch built over a lintel or over an arch which is not strong enough, in order to relieve it of some of the weight of the superstructure (fig. 12). Called also a 'discharging arch.'

RERE-ARCH. One which supports the wall over the *recess* of a window or door as distinct from the outer arch.

SCONCHEON ARCH. The same as a rere-arch.

SKEW-ARCH. One in which the axis is not at right angles to the face, as when a railway passes obliquely

over a road; in this case the courses are kept at right angles to the face of the arch and not parallel with the axis; they are in consequence inclined to the horizon.

SQUINCH-ARCH. *See* SQUINCH.



FIG. 12. RELIEVING ARCH

Names of various forms of arch (fig. 13):

A	Round	M	Pointed trefoil
B	Stilted	N	Cinquefoil
C	Horseshoe	O	Round cusped
D	Segmental	P	Pointed cusped
E	Equilateral	Q	Italian pointed
F	Acute	R	Italian round
G	Obtuse	S	Stepped
H	Four-centred	T	Joggled lintel, with relieving arch
I	Three-centred	U	Straight
J	Elliptical	V	Triangular
K	Ogee		
L	Round trefoil		

ARCHITECT (*Gk.* ἀρχι, chief; τέκτων, builder, craftsman). "A master builder; especially a skilled professor

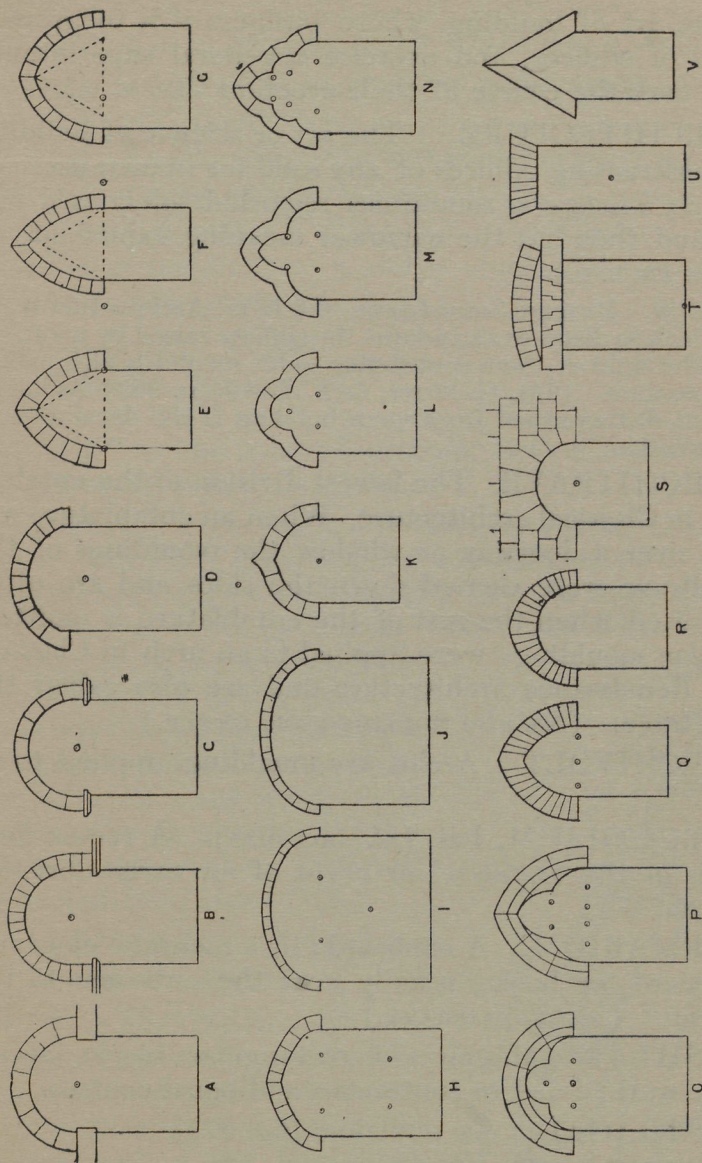


FIG. 13. DIAGRAMS OF ARCHES OF VARIOUS FORMS. (See p. 10)

of the art of building, whose business it is to prepare plans of edifices, and exercise a general superintendence over the course of their erection" (N. E. D.).

ARCHITECTURE. "The art or science of building or constructing edifices of any kind for human use. . . . But *Architecture* is sometimes regarded solely as a fine art, and then has the narrower meaning explained . . . below (N. E. D.).

"1849. RUSKIN, *Seven Lamps*, I. § 1, 7. Architecture is the art which so disposes and adorns the edifices raised by man . . . that the sight of them contributes to his mental health, power and pleasure. 1879. G. SCOTT, *Lect. Archit.*, II. 292. Architecture as distinguished from mere building is the decoration of construction."

ARCHITRAVE. The lowest division of the entablature in Classical architecture. When an entablature was used over a doorway or window the mouldings of the architrave were carried down the sides and are often thus used when the rest of the entablature is omitted. Similar mouldings were applied to an arch in Classical and Renaissance architecture and are also called the architrave. (*See also* MOULDING *and* ORDER.)

ARCHIVOLT. Architrave mouldings applied to an arch.

ARCISOLIUM, Lat. (*pl.* ARCISOLIA). A recess for a tomb in the *confessio** or crypt of an early Christian church.

ARMARIUM. A cupboard; in a monastic cloister a cupboard for books, usually near the entrance to the church. (*See also* LIBRARY.)

ASHLAR. Masonry of rectangular blocks accurately worked and in continuous and equal courses.

ASTRAGAL. *See* MOULDING (fig. 175).

ATRIUM. The first court of a Roman house, surrounded by rooms, and serving both as a court and as a

* *See* article thereon.

hall ; it was partly covered in, but in the centre of the roof there was an opening under which was a tank.

ATTIC. A garret* or chamber constructed in the roof. (*See* ATTIC ORDER.)

ATTIC BASE. The most common moulding for the base* in the Ionic and Corinthian orders.

ATTIC ORDER or STOREY. In Classical and Renaissance architecture a storey above the main entablature. (*See* ORDER, CLASSICAL.)

AULA (Lat.). A hall.

AUMBRY. *See* ALMERY.

BAILEY. The court of a castle* between the keep and the outer wall.

BALDACHINO (Ital.). A canopy over an altar in Italian churches. The original meaning was "a rich embroidered cloth of gold and silk used for copes, palls, etc.; also the portable canopy which was borne over shrines, etc., in processions. The bronze CIBORIUM of St. Peter at Rome was termed the *Baldachino*, and hence the modern application of this word to a fixed CANOPY over an altar or throne, whether supported on pillars or suspended from above" (P.).

BALISTRARIA. A loophole in the wall of a fortress.

BALL-FLOWER. An enrichment carved in the hollow of a moulding in the latter part of the thirteenth and during the greater part of the fourteenth centuries (fig. 14).

* See article thereon.

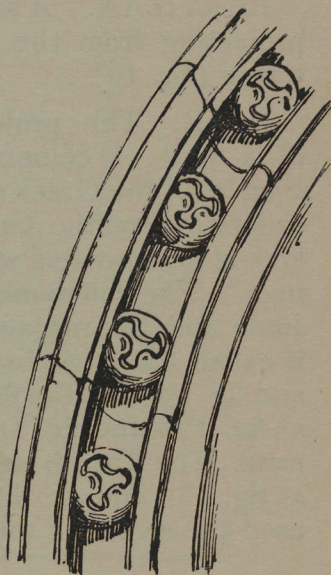


FIG. 14. BALL-FLOWER.

BALUSTER. A small shaft, round or square, the diameter of which varies at different levels.

BALUSTRADE. A row of balusters.

BAPTISTERY. A building or part of a building set aside for the sacrament of baptism. In Italy it was sometimes a distinct building which served for the whole town. It was never used in England, the font always standing in a conspicuous position in the church, and generally in the centre of the nave near the west end.

BARBACAN, BARBICAN. An advance work defending the entrance to a castle or fortified town.

BARGE-BOARD. A board, often decorated, under an overhanging gable (fig. 15).

BARTIZAN. A small turret projecting from the angle of a tower (fig. 16).

BASE. The projecting foot of a wall or column. It was used in all the Greek and Roman orders except the Greek Doric, and is ornamented with mouldings.* The commonest form for Ionic and Corinthian was what is called the Attic base (fig. 17 *a* and fig. 19), but the forms shown at fig. 17 *b* and fig. 18 were also used. The Tuscan base is shown at fig. 17 *c* and *e*. The Romans used the section *d* for pedestals.

* See article thereon.

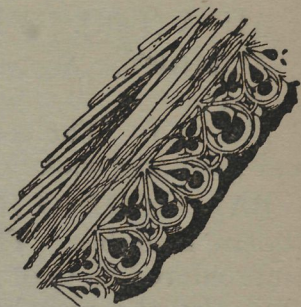


FIG. 15. BARGE-BOARD

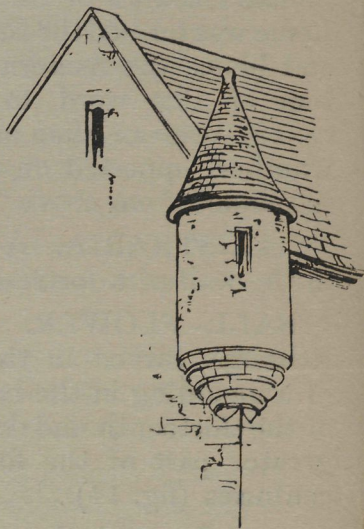


FIG. 16. BARTIZAN

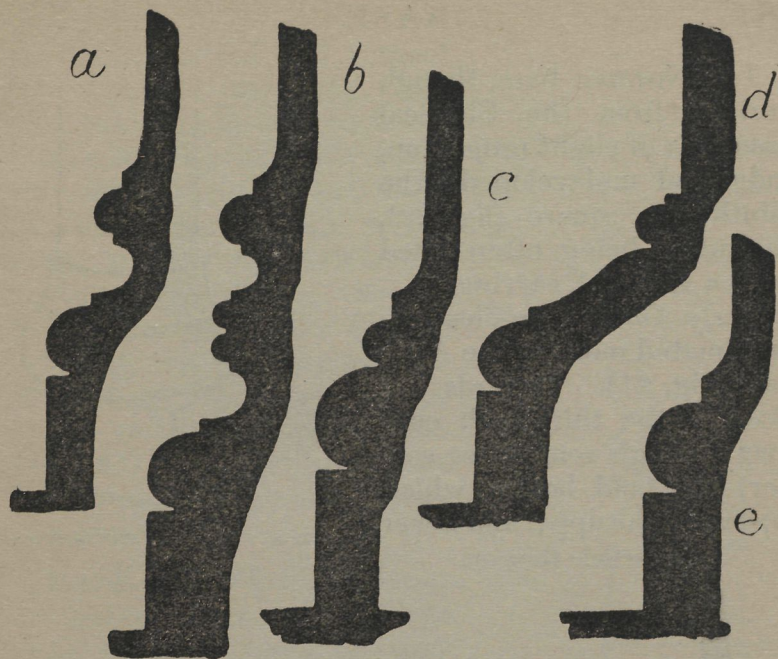


FIG. 17 CLASSICAL BASES

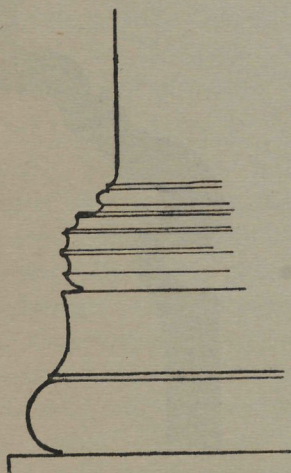


FIG. 18. IONIC BASE

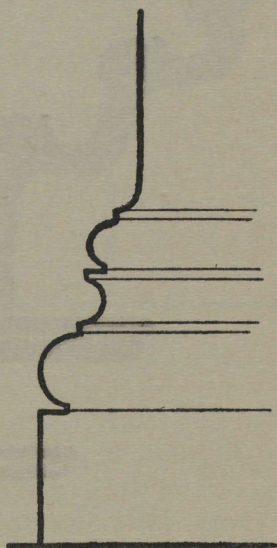


FIG. 19. ATTIC BASE

The Norman base, though derived from the Classical base, was of slight projection, rude, and undeveloped; the plinth was square (fig. 20), the angle being often filled with a spur* of carving.

Early Gothic profiles approximated more to the Attic base (fig. 21). Towards the close of the thirteenth century (though sometimes earlier) the bold hollow which separated the upper and lower

* See article thereon.

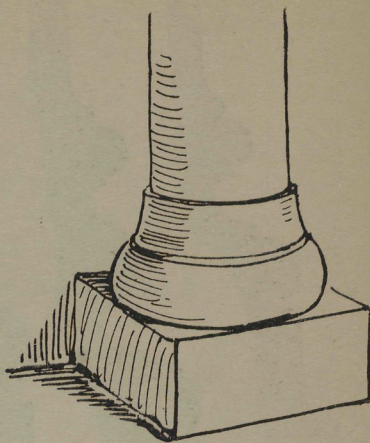


FIG. 20. TWELFTH-CENTURY BASE

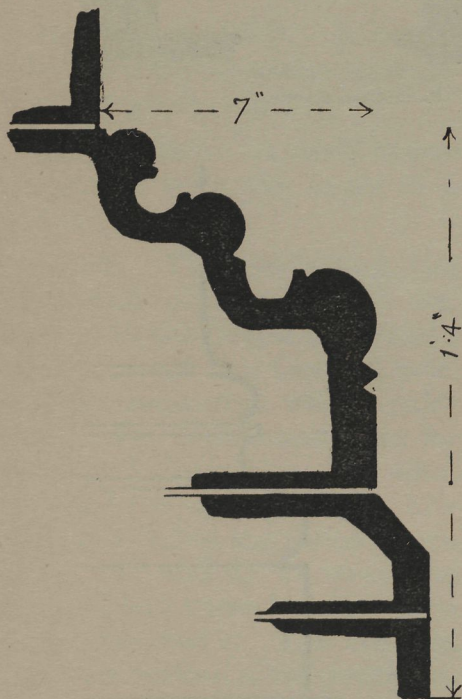


FIG. 21. THIRTEENTH-CENTURY
BASE



FIG. 22. FOURTEENTH-CENTURY
BASE

rolls was omitted and a third roll took its place (fig. 22). The base mould of a wall was most commonly a simple chamfer, though mouldings were also used. (*See* PLINTH.) In the latter part of the fourteenth century, and during the fifteenth, the base of the column gradually became higher, the mouldings being more elongated and of less projection (fig. 23). The Renaissance base of course followed Classical precedent.

BASE-COURT. The lower or outer court of a large medieval house, generally surrounded by stables and offices.

BASEMENT. 1 (Classical and Renaissance). A storey or high plinth below the main order. 2 (Modern). A storey partly below ground.

BASILICA (Gk. βασιλικός, royal). A large hall. The origin of the term, as applied to a building, is obscure. The Roman basilica, primarily an exchange and secondarily a law-court, was of various forms: enclosed by solid walls, or by columns and screens (*cancelli*) only; rectangular or with an apse at one or each end. Most examples have one or two aisles on each side, with galleries above them. The seat of the judge was in the apse, and in front of it there was an

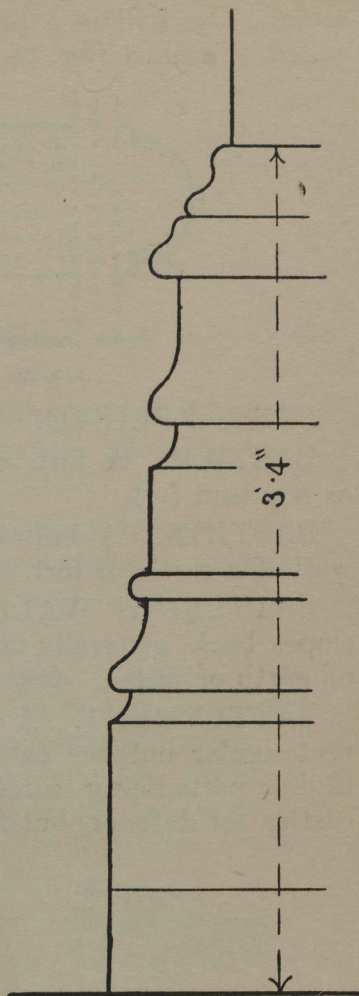


FIG. 23
FIFTEENTH-CENTURY BASE

altar. The hall of a private house was also sometimes called a basilica (fig. 24). (*See also* CHURCHES.)

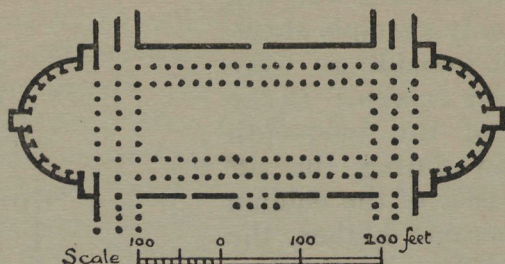


FIG. 24. PAGAN BASILICA

BASSO-RELIEVO. *See* RELIEVO.

BASTILE. A fort, castle or bulwark; often used as a prison (P.).

BASTION. A bulwark projecting from the outer wall of a castle or fort.

BATTERING WALL. A wall the face of which slopes back, generally used for sustaining the pressure of earth or water. (*See* RETAINING WALL.)

BATTLEMENT. A parapet* with a succession of rectangular notches called crenels or embrasures, the higher parts being called merlons. Originally used in castles for defence, but from the fourteenth century in

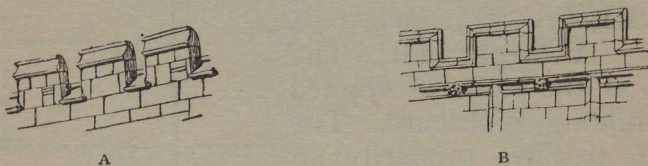


FIG. 25. BATTLEMENTS

parapets of other buildings and also on a diminutive scale as an enrichment on mouldings, etc. In the early battlements the sides of the merlons are plain (fig. 25 A), but in later examples the moulding of the coping is carried down them (fig. 25 B).

* See article thereon.

BAY, SEVERY. A compartment of a building between two columns, roof principals, buttresses or other repeated feature.

BAY-WINDOW. The same as bow-window* (p.). A window in a recess; not the same as bow-window (s.). Possibly a window occupying a whole bay.*

BEAD. A small projecting moulding* of semi-circular section (fig. 176).

BEAK - HEAD ORNAMENT. See BIRD'S - BEAK ORNAMENT.

BED-MOULDING. A moulding or series of mouldings under the corona of a cornice or other similar projection. (*See also ORDER, CLASSICAL.*)

BED OF A STONE. The lower surface of a stone; the upper surface, if prepared to receive another stone, is called the top bed. The *natural bed* is the natural stratification.

BELFRY. (1) The chamber of a tower in which the bells are hung; (2) a bell-tower. Seldom used in England except in connection with churches. The tower was sometimes detached from the building, as at Salisbury, Norwich, and Chichester (all destroyed), and at some parish churches, and was intended to be so at King's College, Cambridge.

BELL OF A CAPITAL. The body of the capital between the astragal or necking (p. 186) and the abacus.

BELL-COTE, BELL-TURRET. A small bell-tower; a bell-house. The most common forms are the following: (1) The west or east wall of the nave is carried up and has one or two piercings, occasionally three, in which the bells are hung; it is finished with a steep gable (fig. 26); examples of this type at the west end of the church and forming the only belfry, are

* See article thereon.

common in the southern midlands; the same sort is used in other parts for a special small bell over the chancel arch. (2) A low timber framing covered with boarding or shingles and having a pyramidal roof, is supported on the west wall and the west part of the nave roof (fig. 27); it is used in the west and in the south-east of England.

BENCH-TABLE. A bench of solid masonry against the inside of the wall of a medieval building.

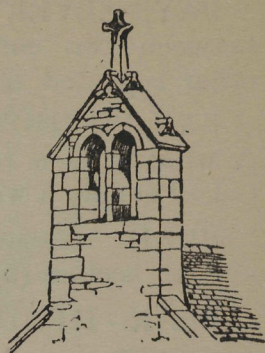


FIG. 26. STONE BELL-COTE

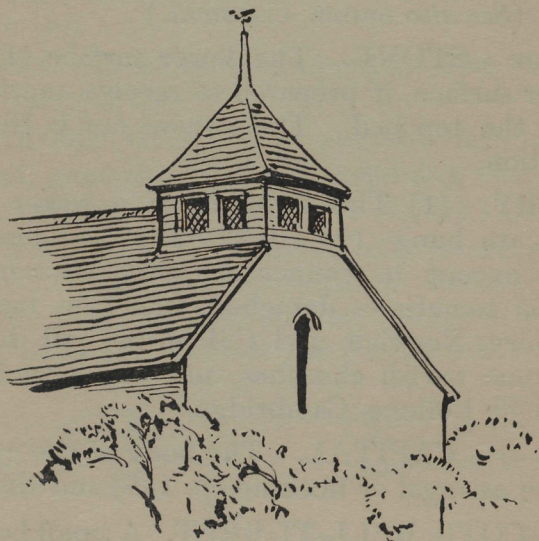


FIG. 27. WOOD BELL-COTE

BEVEL. The plane formed by cutting off the edge of a surface at a slight angle, e.g. a bevelled mirror. (*See also* CHAMFER.)

BILLET ORNAMENT. An enrichment used in Romanesque architecture, consisting of short cylinders placed at intervals in a hollow moulding (fig. 28).

BIRD'S-BEAK ORNAMENT. An enrichment used in Romanesque architecture consisting of a series of grotesque beaked heads crossing the mouldings (fig. 29. *See also* p. 188).

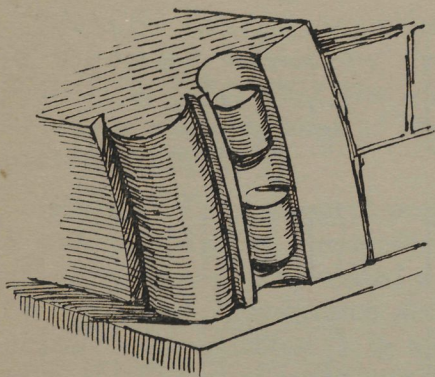


FIG. 28. BILLET

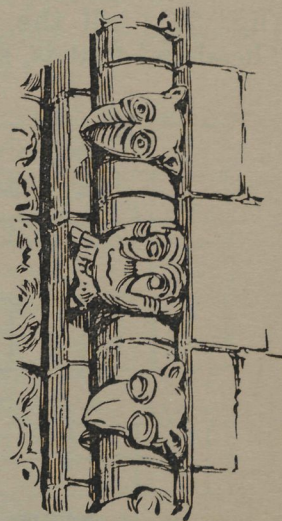


FIG. 29. BIRD'S-BEAK ORNAMENT

BLIND-STOREY. *See* TRIFORIUM.

BLOCKING COURSE. A plain course of masonry over a cornice (fig. 30).

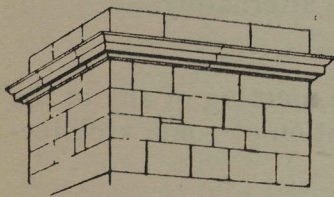


FIG. 30. BLOCKING COURSE

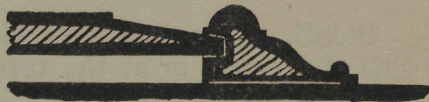


FIG. 31. BOLECTION MOULDING

BOLECTION MOULDING. A moulding placed round a panel and projecting beyond the face of the framing (fig. 31).

BOND. The overlapping of the courses of stones or bricks in a wall. In masonry the method depends upon the regularity or otherwise of the stones. In brickwork there are two systems: (1) English bond (fig. 32); all the bricks in one course are laid as 'headers,' that is, showing their ends, and in the next

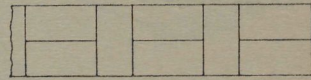
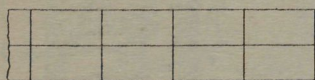
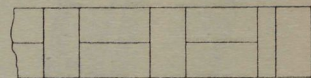
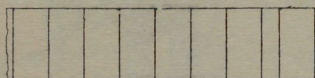
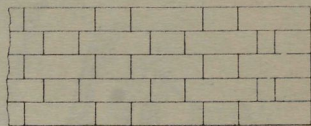
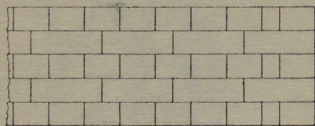


FIG. 32. ENGLISH BOND

FIG. 33. FLEMISH BOND

course as 'stretchers,' showing their sides, and so on alternately. This system is the strongest; it was in use in England from the sixteenth century to the end of the seventeenth, and was revived in the nineteenth. (2) Flemish bond (fig. 33); in every course the bricks are laid as headers and stretchers alternately.

BONE HOUSE. See CHARNEL HOUSE.

BOSS. A carved stone at the meeting of any of the ribs of a vault, or at the termination of some architectural feature.

BOUDOIR. A private room for a lady; literally, a place to sulk in; from French *bouder*.

BOW-WINDOW. A projecting window, semi-circular or polygonal on plan. In the middle ages seldom used but in the hall, where it was on one or both sides

near the dais end. In the reign of Elizabeth it became common in other rooms. Corrupt form of bay-window* (P.).

BOWER. (Medieval.) A lady's private room.

BOWTEL. A projecting moulding* of cylindrical form or approximating to a cylinder.

BRACE. In carpentry a short piece of timber placed in the angle formed by two principal timbers in order that the angle may be kept true and the shape of the framework preserved (fig. 34).

BRACKET. A support projecting from a wall or column. In medieval work, if of stone, it is usually called a corbel;* in Classical and Renaissance architecture, a console* or modillion;* in modern buildings, if of iron, a cantilever.

BRANDRITH. A fence or rail round the opening of a well (G.).

BRASS (SEPULCHRAL). See MONUMENT.

BRASS (METAL). An amalgam, consisting of one part of zinc and from three to seven parts of copper.

BRATTISHING. A cresting, e.g. a pierced or ornamented parapet of a wall; a row of upright leaves on the cornice of a fifteenth-century screen or round a ducal coronet. (See TUDOR-FLOWER).

BREAST-SOMMER, BRESSUMMER. A beam or summer supporting the front of a building, etc., after the manner of a lintel. It is distinguished from a lintel by its bearing the whole superstructure of wall, etc., instead of only a small portion over the opening; thus the beam over a common shop-front which carries the wall of the house above it is a bressummer (P.).

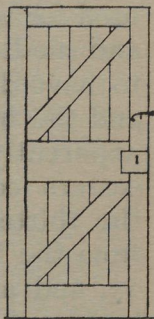


FIG. 34.
BRACED DOOR

* See article thereon.

BRÉTASCHE. *See* CASTLE.

BRICK, BRICKWORK. Bricks were much used by the Romans; in Britain Roman bricks vary in size from about 6 inches square to about 18 inches by 12, the smaller sizes being more commonly used for the pillars of hypocausts (*see* ROMAN ARCHITECTURE) and the larger sizes for walls. The thickness varies from $1\frac{1}{4}$ inches to $1\frac{3}{4}$ inches. They were frequently used for bonding courses and as quoins in walls of flint and small stones. The practice of brick-making seems to have died out after the departure of the Romans, and the bricks used by the Saxons and Normans were apparently taken from Roman buildings. In the eastern counties bricks were occasionally used from the thirteenth century; they were perhaps imported from the Netherlands; they measure about 9 inches by $4\frac{1}{2}$, and are $2\frac{1}{2}$ thick. In the fifteenth century they became fairly common especially in fireplaces, because they will stand the heat better than stone; they are generally about 10 inches by 5, and are $1\frac{1}{2}$ to 2 inches thick. In other parts of England where good stone was obtainable they were not much used till a century later, nor generally till the eighteenth century. In the nineteenth century the thickness increased to $2\frac{3}{4}$ and 3 inches (figs. 114, 133).

Bricks were laid without method till the sixteenth century when English bond* was introduced. Ornamental brickwork then became very elaborate and was practised with skill, as in chimney* stacks (fig. 54). These forms gave way to a simpler and more appropriate treatment in the seventeenth century. Moulded cornices with carved enrichments were used with good effect in the eighteenth century. On the invention of Roman cement and the general decay of taste early in the nineteenth century, brickwork as a means of architectural expression fell into discredit.

* *See* article thereon.

BRIDGE. A few medieval bridges still remain. The arches are generally of small span and pointed, and they are strengthened by a number of parallel ribs. The piers are sharply pointed especially up stream, forming a 'cut-water.' A bridge approaching a town was defended by a gateway tower in the middle, as at Monmouth, or at one end, as at Sandwich. In some instances there is a chapel, perhaps endowed before the bridge was built, that travellers might pray for protection in crossing the ford or ferry; examples may be seen at York, Wakefield, Rotherham, St. Ives (Hunts). Houses were also built over the roadway, as on London Bridge, the rents from them being of value to the town.

BRITISH ARCHITECTURE. The architecture of pre-Roman times. The houses are said to have each consisted of a single room, round or square. Stonehenge is far the most important work extant.

BROACH. When a square tower is surmounted by an octagonal spire each angle is covered by a half-pyramid, the apex of which is in the centre of one of the sides of the spire (fig. 221); these half-pyramids are called broaches; the spire is called a broach spire; usually its cardinal faces rise from the faces of the tower without a parapet. The term is also occasionally applied to the spire itself.

BRONZE. *See* LATTEN.

BUHL WORK. Formerly called 'Boule' work from the name of its inventor. It consists of one or more metals laid upon a ground of tortoiseshell, alone or with coloured woods, or of these last-named materials inlaid upon grounds of metal. The process is as follows: Two pieces of veneer are placed together, with paper between them, each being glued to the paper. Upon the surface of the upper one is placed

the drawing of the pattern to be cut, and then the outlines of it are cut through by means of a very fine watch-spring saw. The parts are then separated, that which is taken from the darker wood is let into the lighter wood and *vice versa* (G.).

BURH. See CASTLE.

BUTTERY. A 'butlery,' a room at the lower end of a medieval hall in which victuals and especially liquors were kept. It opened into the screens passage. The door was in two heights like a stable door, the lower part having a shelf on the top for convenience in serving out provisions. (See HOUSE.)

BUTTRESS. A mass of masonry or other like material built up against a wall (or at a short distance from it, and connected with it by an arch) in order to resist the thrust of a roof or vault, or otherwise to strengthen the building.

The Romanesque buttress derived from Roman architecture was wide and of slight projection, and was of no structural use. The angles were often ornamented with a bowtel moulding. When the pressures of roofs* and vaults* began to be concentrated at particular points it became necessary to increase the projection of the buttress, and at the same time the thickness of the wall was reduced. At the beginning of the thirteenth century the projection at the base was about equal to the width; it was gradually reduced by weathered, i.e. sloping, offsets, the top being finished with a weathering or with a gablet, or, in large buildings, with a pinnacle; the angles were chamfered; at the corner of a building there were two buttresses at right angles to the walls. At the end of the thirteenth century the projection had increased and the corners were not chamfered. In the fourteenth century one buttress was placed diagonally at the corner of a

* See article thereon.

building. The projection increased still more in the fifteenth century; the corners of buildings had either one diagonal buttress or two placed square; pinnacles were used more often than formerly.

FLYING BUTTRESS. In order to carry the thrust of a nave vault over an aisle or cloister, a 'flying buttress' was used (fig. 35). A vertical buttress was built on the further side of the aisle, and a half-arch was thrown from this to the point at which the thrust had to be met. This half-arch carried the pressure across the space, producing an oblique thrust on the buttress some little distance below its head. The weight of the head of the buttress and of the pinnacle which generally crowned it gave to the oblique thrust a direction more nearly vertical, as indicated by the arrows in the diagram (fig. 35). As the pressure descended it became more vertical, owing to the weight of the masonry itself, so that when the ground was reached, the direction of the pressure fell within the foot of the buttress, which was a necessary condition of stability.

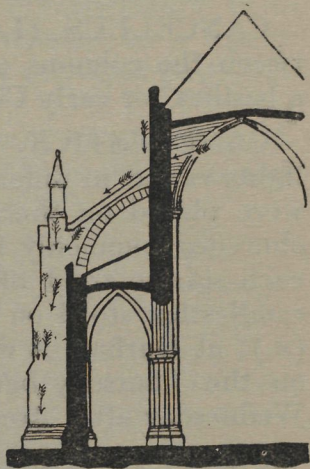


FIG. 35. PRINCIPLE OF THE FLYING BUTTRESS

BYZANTINE ARCHITECTURE. The architecture of Byzantium, the ancient Constantinople.

CABINET. A small room used as a study or for the preservation of curios.

CABLE MOULDING. A spiral moulding like a cable, used in Romanesque architecture (fig. 7).

CALEFACTORY. A warming room; a room in a monastery where a fire was kept burning in cold

weather, to which the monks were occasionally allowed to resort when chilled by the church services or by study in the cloister.

CAMBER. The upward rise towards the centre in the tie-beam of a roof, or in other similar beam, or in a straight arch,

CAMPANILE (Ital.). A bell-tower.

CANCELLUS (Lat.). A lattice-work screen between the columns of a portico or round the altar in a basilica* or early Christian church.*

CANDLESTICK. In the middle ages the use of lights varied in different churches; one or more lights were placed on the altar during mass; well-furnished churches commonly had a pair of tall candlesticks on each side in front of the high altar (M.). The Pascal candlestick stood on the north side of the presbytery (M.); at Durham it was in the middle, and was set up on the Thursday before Easter and removed on the Wednesday after Ascension Day.

CANOPY. A roof or projection to protect a door, altar, statue, or other object. Canopies over doors have been in general use in domestic architecture at all times; they are usually of wood, supported on brackets, and are finished with a gable or with a flat roof or otherwise. They were also placed over altars in the middle ages and were either of wood or consisted of curtains hung on iron rods. Similar canopies sometimes projected over the high-table in a medieval hall, the original object in both cases being to afford a protection from falling dust and from draughts. From the thirteenth to the middle of the seventeenth centuries canopies were also placed over important sepulchral monuments.* They were also used above niches* during the fourteenth and fifteenth centuries.

* See article thereon.

CANT. An oblique face; the term is usually applied to large objects, e.g. a bow-window which is a half octagon or half hexagon on plan is said to have canted angles, whereas the terms chamfer* and bevel* and splay* are applied to small solid objects.

CANTILEVER. A bracket.

CAPITAL. A stone placed on the top of a column to make a wider bearing for the superstructure, or to effect a transition from a round column to a square superstructure. It consists of two principal parts, the bell* and the abacus.*

The Greek Doric capital consists of an ovolo moulding,* circular in plan, surmounted by an abacus, square in plan and with square edges (fig. 36).

The capital of the Ionic order* is rectangular in plan, with two large spirals or volutes in front and two behind; the

Corinthian capital has a high circular bell ornamented with acanthus* leaves,

the abacus having four concave sides;

the Roman Doric has a moulded capital;

the Roman Ionic and Corinthian have a general resemblance to the Greek; the Tuscan is like the Doric; the Composite combines the acanthus leaves of the Corinthian with the volutes of the Ionic.

In Saxon architecture the capital is a rude imitation of Roman work, with mouldings or with leaf forms and volutes disposed somewhat at random. In the Norman capital, as in the Saxon, the bell and the abacus are worked on separate stones. In plan the abacus of a large pier generally follows approximately the plan of the pier itself; for small shafts it is invariably square; in section the upper edge is square and the lower edge is chamfered. The lower part of the bell is made round to fit the column, while the upper part is square to fit

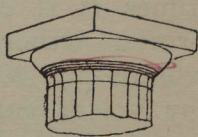


FIG. 36. GREEK
DORIC CAPITAL.

* See article thereon.

the abacus; this gives a form which is known as the cushion capital (fig. 37). The most common way of decorating this plain block is by cutting vertical flutes, producing the scalloped capital (figs. 38, 39). Some-

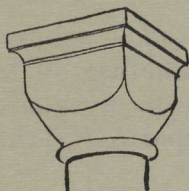


FIG. 37.
CUSHION CAPITAL

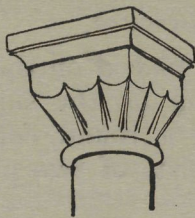


FIG. 38.
SCALLOPED CAPITAL

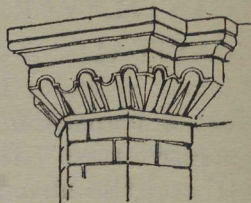


FIG. 39.
SCALLOPED CAPITAL

times it is covered with involved interlacing scroll work. Other varieties are a rude imitation of the volute (fig. 40), and a curious reversed volute formed by a leaf curling upwards under the corner of the abacus instead of bending downwards (fig. 41).

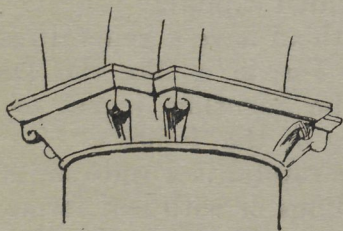


FIG. 40.
CAPITAL WITH RUDE VOLUTES. ELY



FIG. 41.
REVERSED VOLUTE

Some Norman capitals have foliage which shows very clearly its derivation from the Roman acanthus, and this gradually developed into the characteristic foliage* of the thirteenth century, forming a succession of very

* See article thereon.

freesprays (figs. 42, 103). In another type the foliage is gathered up into knobs (fig. 43).

During the latter part of the twelfth century another and very dull form was developed, namely the moulded capital which is ornamented with rings of mouldings* round the upper part of the bell (fig. 44). This form soon became more common than the carved capital and eventually superseded it entirely. At first the mouldings are simply treated, and the capital when placed at a great height makes a passable though uninteresting sort of corbel for the arch.

At the beginning of the fourteenth century the remarkable change in the foliage* from forms of abstract beauty to close imitations of particular species is seen in the carved capital. The leaves are disposed in a wreath-like manner round the bell (fig. 106) and they lose the bold lights and shadows of the earlier work. The moulded capital has not the deep hollows of the thirteenth century. In the fifteenth century the mouldings became weaker, and sculpture is rarely used

* See article thereon.

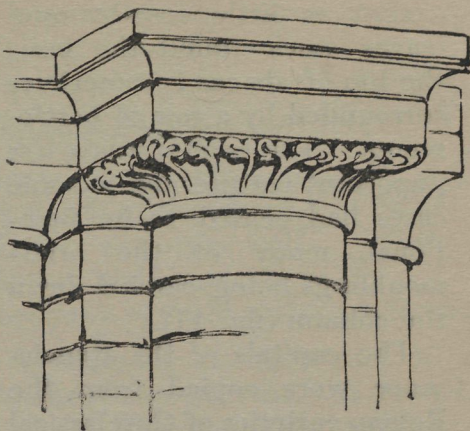


FIG. 42. EARLY FOLIAGE
ST. LEONARD'S PRIORY, STAMFORD

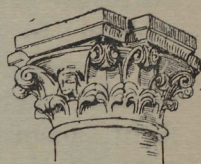


FIG. 43. CAPITAL
WITH VOLUTE-LIKE
FOLIAGE

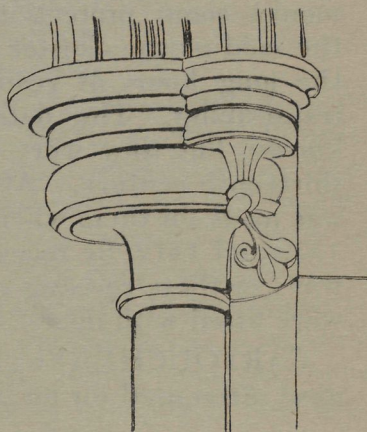


FIG. 44. MOULDED CAPITAL

except as little rosettes and leaves stuck round the bell; the top of abacus is sometimes surrounded by a row of battlements. The capital was a less important feature and in some cases had ceased to be functional, many of the arch-mouldings being carried down the column (fig. 45).

The capitals of the Renaissance were copied from the Roman varieties of the classical orders,* with slight variations.

CARRELL. A small boarded enclosure erected in a monastic cloister to serve as a study for a monk; one was placed against each window or each light, according to the character of the window, and was just large enough to contain a seat and a desk for one person. Their object was to afford the monks some protection from the cold of the cloister during the long hours of reading or transcribing. The date of their introduction is unknown, but they were in use in the latter half of the thirteenth century. At Gloucester Cathedral provision was made for them when the cloister was built, between 1370 and 1412, by recessing the windows in a peculiar way; or these recesses were themselves the carrels and were fitted with doors.

CARTOUCHE (Fr., a roll of paper). (1) A tablet, most often used for an inscription or for a coat of arms,

* See article thereon.

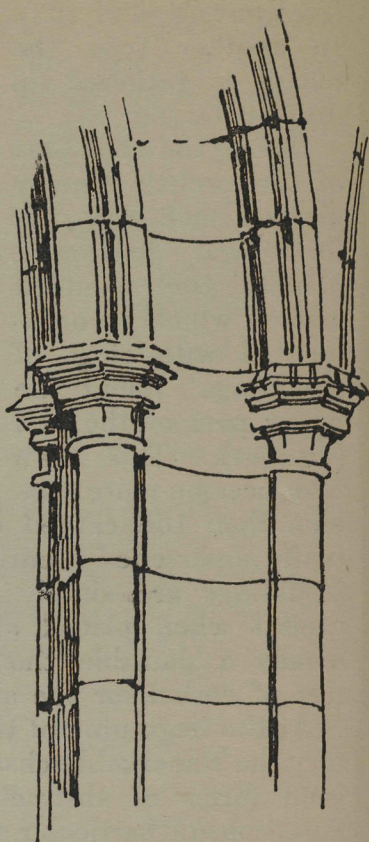


FIG. 45.

FIFTEENTH-CENTURY CAPITALS

resembling a sheet of paper with the edges curled up (fig. 46). (2) A modillion of a cornice with a scroll-like form.

CARVING. See FOLIAGE and SCULPTURE.

CARYATID. Columns in the form of human figures, as in the porch of the Erechtheum, Athens; or pilasters as satyrs, half man and half goat; or human bodies growing out of square tapering columns, or other grotesque forms.



FIG. 46.
CARTOUCHE

CASEMENT. (1) A window; (2) that part of a window which opens on hinges at the side. A French casement is continued to the floor and is divided down the middle so as to make a pair of glass folding-doors.

CASEMENT MOULDING. A wide shallow moulding much used in the fifteenth century, especially in the internal arches and jambs of windows (fig. 47).

CASTLE. There is much difference of opinion on the subject of Saxon and Norman strongholds.

Till recently it has been held that the Saxon 'burh' was a conical mound surrounded by a ditch and wooden palisade, and that these burhs were numerous and occupied good strategic positions, so that the Conqueror possessed himself of them and gave them to his followers, and he and his successors simply strengthened them and gradually substituted stone walls for the wooden palisades (cl.). Thus there was created a type of Norman castle known as the shell keep consisting of a high circular wall containing sufficient buildings to serve the garrison when the place was besieged, in marked contrast to the 'square keep' which was the type chosen by the Norman when he occupied a new site.



FIG. 47
CASEMENT MOULDING

The Round Tower at Windsor and the White Tower of the Tower of London are examples of these two types, which will be more fully described presently.

The later view is that the Saxon 'burh' was a fortified town, that the circular 'shell keeps' of the Normans were entirely new creations on new sites, that palisades were first put up, and that these were replaced by stone walls when the artificial mound had become sufficiently consolidated to bear their weight (H.).

Many of the castles begun by his father and brother were completed by Henry I., and perhaps most of our square keeps may be attributed to him. Many castles were in private hands, having been rebuilt by the barons in the preceding reigns. These strong private castles were objectionable to both the king and people, as they made the owners powerful and too independent of the one, while they gave them too much opportunity of tyrannizing over the other. The old English fortified house, besides being owned and garrisoned by a fellow-countryman of the surrounding population, had not been strong enough to give much consequence to its lord.

Castle-building was always considered a royal prerogative, and though circumstances sometimes compelled the king to wink at its infringement, a subject could fortify his house only under special licence. An immense number of unlicensed castles—*castra adulterina*—were erected during the troubles of Stephen's reign by the lesser nobility and used by them for purposes not far removed from brigandage. One of the first acts of Henry II. was to order the destruction of these and of some castles of the greater nobility. This measure, although necessary, gave great and undue prominence to the great old castles. After the suppression of the rebellion of 1173, therefore, Henry dismantled many castles or took them into his own hands and strengthened them whenever opportunity offered.

The Norman keeps were succeeded in the latter part of the twelfth century and the first half of the thirteenth by round towers, known as Donjons or Juliets. They were entered on the first floor by stone steps or a drawbridge. Conisborough in Yorkshire is a remarkable example; it measures only 25 feet in diameter internally and as much as 52 feet externally, the walls being 14 feet thick, and it is near 90 feet high. These towers did not contain dungeons*; the basements were above ground and were not used as prisons.

With Henry II. the great period of castle-building ends, at least so far as quantity goes. At the close of his reign there were, it is estimated, more than a thousand castles in England and Wales. Henry III. gave his attention chiefly to repairing and improving halls, chapels and outer wards. The strong rule of Edward I. very much diminished the value of castles. Those which he himself built in Wales were a new type and show a great advance in the science. They have been called 'Concentric' castles (see p. 39). But even these ceased to be of use and fell into decay when once the country had been subdued.

Castles gradually gave place to more or less fortified houses, for which a great number of licences, called Licences to Crenellate, were granted by the three Edwards and by Richard II. In Richard's reign also the royal castles were handed over to the county authorities to serve as prisons.

THE SQUARE KEEP. This type was used by the Normans, both in Normandy and in England, during the eleventh and twelfth centuries. A large and strongly walled outer court, generally of irregular shape, contained the hall, the kitchen and other domestic buildings ordinarily in use, the size and arrangement of which varied according to circumstances. The keep was used only during a siege. It was placed on

* See article thereon.

the highest part of the site and was itself much higher than any of the other buildings. It was rarely in the centre of the castle and was sometimes very near to, or even formed part of, the *enceinte*.

The square keeps vary in size from 25 feet to 80 feet or even 100 feet along each side (externally), and are usually from one and a half to two diameters high. Broad flat pilasters are placed on the sides and at the angles, those at the angles being carried up above the parapet as turrets. The walls are from 7 feet to 14 feet thick, and at the base 20 feet or even more. The *allure* or walk on the top of the wall behind the parapet is 6 or 8 feet wide.

The keep was invariably entered at the level of the first floor. The door was reached through a small and strongly defended building running along one side of the keep and containing a straight stone staircase. In the smaller keeps and sometimes in the larger, the staircase is of wood and has no enclosure.

Internally the keep was divided by a cross wall which, on the principal floor, was pierced by one or more large arches. All keeps have a basement, used as a store-house, above ground. In the small keeps there was only one storey above this, forming a large general room, but in the larger keeps this room formed a barrack, and the chief room or hall, some 30 feet high, was on the second storey, and sometimes there was a third floor over this (fig. 48). The staircase was generally a spiral in one angle, the whole height of the building. The basement walls are usually solid, but those of the upper storeys contain numerous small chambers, about 5 feet wide, used as sleeping-rooms, and as an oratory, a well-chamber, and privies. The smaller keeps had generally a single high-pitched roof, probably covered with shingles or with stone tiles, but in the larger examples the roof was double, forming an inverted W resting on the side walls and on the dividing wall

mentioned above. The external walls were carried up to the level of the ridge. Flat lead-covered roofs were substituted for these high-pitched roofs at an early date.

The square keep was not, it must be remembered, a residence, except during an actual siege, when it formed a secure refuge till relief came from outside. And it was not in a military sense a scientific building. It was not easily defended; in order to reply to the attack the garrison had to expose themselves; there were no

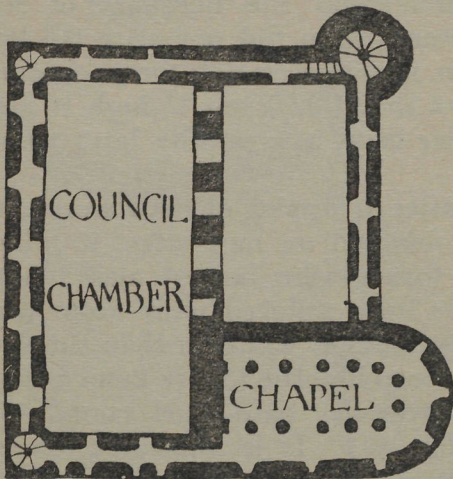


FIG. 48. THE SQUARE NORMAN KEEP
WHITE TOWER, TOWER OF LONDON

‘salients’ or flanking projections commanding the base of the wall. But its mere passive strength made it almost impregnable if well provisioned and defended by faithful retainers. Mercenaries could not be entirely trusted. “Indeed, the builders of some keeps seem to have mistrusted their own troops as much as they feared those of the enemy. The staircases and galleries are often contrived quite as much to check free communication between the several parts of the building as between its inside and its outside.” (CL.)

Notable examples are the White Tower, London;

Colchester and Heddingham, Essex ; Dover and Rochester in Kent ; Norwich and Castle Rising, Norfolk ; Kenilworth, Warwickshire ; Porchester, Hampshire ; Carlisle, Cumberland ; Scarborough, Yorkshire ; Northam, Durham ; Bamburgh, Northumberland.

THE SHELL KEEP. This was the type of keep which is found on sites which had been already defended by earthworks and timber buildings, whether of Saxon or Norman origin. These it appears were found to be very defensible, and the necessity of replacing the timber by stone often did not arise till long after the Conquest, in some cases not for a century. Thus it happens that the shell keep, though it may be said to be the earlier type, is generally later than the square keep. (CL.)

As the castles occupying old sites were more numerous than those founded on new sites, it follows that the shell keep formed the largest class ; but being less massive they have suffered more from the ravages of time and are now less common than the square keep.

The shell keep like the square keep forms the nucleus of a large irregular base-court containing the usual buildings (fig. 49). It is generally placed upon and forms a part of the outer line of defence. It is however entirely surrounded by its own ditch across which the outer wall of the castle is carried. Occasionally the keep occupies a central position, and then it is placed on the line of a ditch which divides the base-court into two wards.

The configuration of the mound, which is always entirely or partly artificial, governs the size and shape of the keep. Most keeps are polygons of ten or twelve sides ; some are round. The diameter varies from 30 to 100 feet. The walls are usually 8 or 10 feet thick and from 20 feet to 25 feet high.

The keep was approached by a wooden bridge across the ditch on the side within the base-court and thence

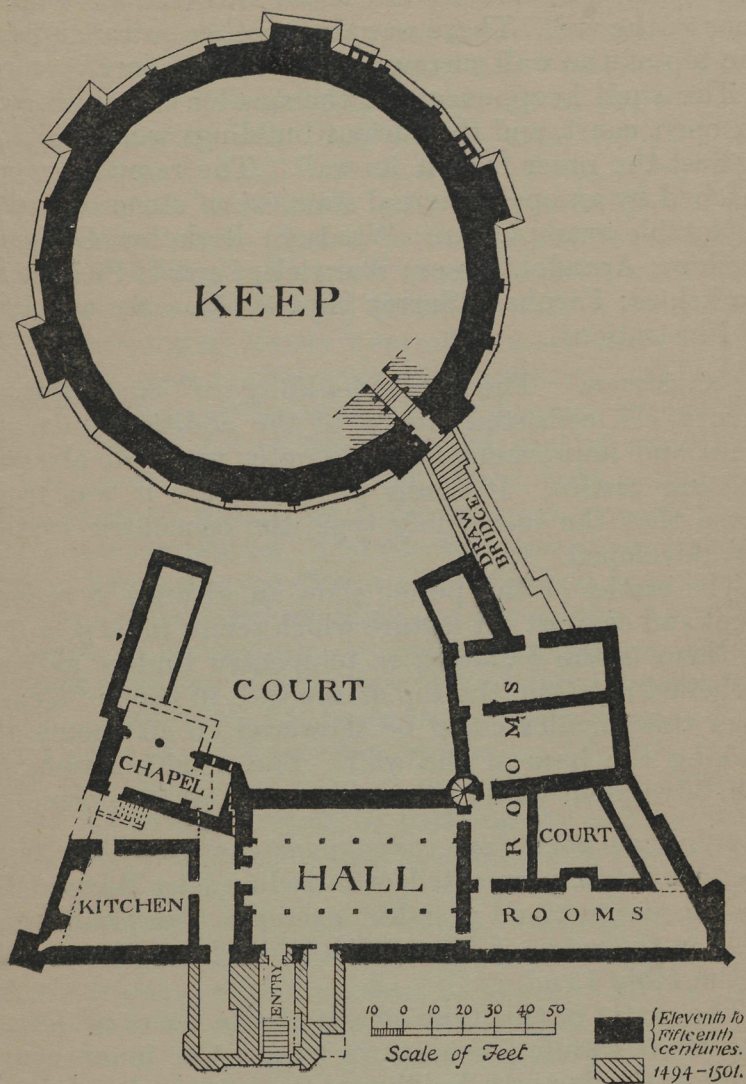


FIG. 49. THE SHELL KEEP AND DWELLING HOUSE
FARNHAM CASTLE

by steps up the mound ; the actual entrance was a mere door in the wall. There was also another entrance from the top of the wall surrounding the base-court.

The shell keep, except in the smaller examples, was an open court, and the various buildings were built up against the inner face of its wall. The ramparts were reached by an open internal staircase of stone or wood.

Notable examples are: Windsor ; Berkeley, Gloucestershire ; Arundel, Sussex ; Warwick ; Cardiff ; Pickering, Yorkshire ; Farnham, Surrey (figs. 49, 50. *See also* List of Illustrations).

TRANSITION. The castle-building of the reign of Henry III. consisted chiefly of the addition, enlargement and improvement of the outer wards of already existing castles. It seems probable that it was from these that the succeeding type, the concentric castle, was developed.

The castles of this period show an advance in refinement and comfort. A feature which seems to be peculiar to them is the *brétasche*, or temporary timber gallery corbelled out from the top of the wall in time of siege ; from this missiles could be showered on an enemy attacking the base of the wall. The machicolations of the Edwardian castle would appear to take its place.

THE EDWARDIAN OR CONCENTRIC CASTLE. This type was not actually invented or introduced by Edward I., for the earliest and grandest example, Caerphilly, was built in the reign of Henry III. while Edward was still in the Holy Land.

The castle of this type consisted of a series of defensive walls forming concentric rings ; the inner court contains the domestic buildings ; the keep is abandoned ; the parts are so disposed as give every advantage to the defenders.

The outer line of defence consisted of a wall with salients or projecting towers which enfiladed the *curtain*

or length of wall between two towers ; and the whole of this line of defence was enfiladed by the inner and higher ring of towers. Sometimes however there was a very large third ward for the protection of the neighbouring peasantry and their cattle ; this contained a ditch or even a small lake formed by damming up a streamlet, the dam itself being well defended.

The middle ward—that between the innermost ring and the next—was too narrow to give scope for a large number of attackers or for them to work a catapult, and the projecting towers were often mere half-circles open in the rear, so that when captured they could not be held. The gatehouse is usually flanked by round towers with loops, and is so planned that it could be defended independently against attack from within if the outer ward was taken. The parapet is corbelled out on machicolations.* Outside the gate there was a *barbican*, which was sometimes a mere walled enclosure, sometimes a detached building on the further side of the moat. The postern or smaller gateway is often elaborate ; that at Windsor was intended for the use of cavalry. Sometimes the postern is a water-gate.

The walls of an Edwardian castle are from 25 feet to 40 feet high and from 6 to 8 feet thick. The parapet has wide merlons or battlements and narrow embrasures with wood shutters ; often each merlon is pierced with a loop.

The buildings of the inner ward, consisting of hall, kitchen, chapel, and general living and sleeping-rooms and storehouses, were large and handsome ; they were usually built up against the curtain. Very complete arrangements were made for sanitation. The castles of this period, indeed, were part palace part fortress, though the latter characteristic is always the more pronounced.

Notable examples are : Caerphilly, Glamorganshire,

* See article thereon.

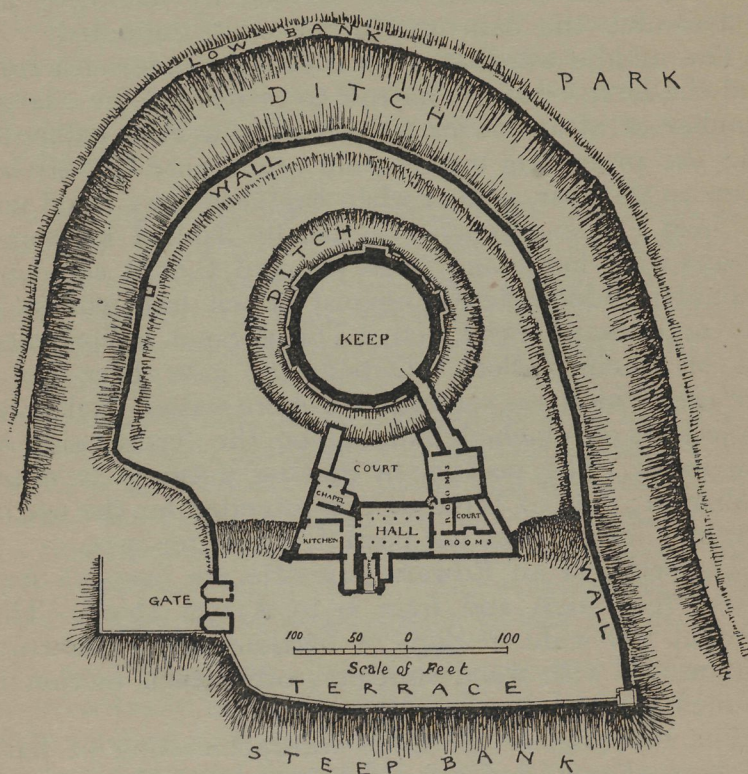


FIG. 50. FARNHAM CASTLE. GENERAL PLAN

the largest in Wales; Beaumaris, Anglesey, very complete and regular; Conway, Carnarvonshire, where the castle and town "form together the most complete and best preserved example of mediæval military architecture in Britain. The works are all of one date and design, apparently by one engineer, at the command of a monarch specially skilled in the art of war" (CL.); Kidwelly, Caermarthenshire; Harlech, Merioneth; Leeds or Ledes in Kent; Caernarvon, of the noblest architecture, is not concentric. The Tower of London has by successive additions become a good example of the concentric type; the outer wall and ditch also give to Farnham (fig. 50) something of the character of a concentric castle. (G. T. Clark, *Mediæval Military Architecture*.)

CATACOMB (Gk. *κατά*, down; *κύμβη*, a hollow place). A system of underground passages formed by the early Christians in the neighbourhood of Rome as a secret place of burial during the age of persecution. There are about sixty of such cemeteries round the city and they are of very great extent, some of them occupying an area of several acres. They are of various ages, from the time of the martyrdom of St. Peter to the middle of the second century, but they continued in use as cemeteries, as places of worship and as objects of pilgrimage till the sixth century.

The catacombs are excavated in the dry spongy volcanic stone called *tufa*. The passages are about 8 feet high and from 3 to 5 feet wide, and they are generally at right angles to one another. The sides of the passages contain *loculi* or graves, one above another, generally five in a tier. The recesses were closed with slabs of marble or with tiles, bearing inscriptions and pictures. There are occasional larger arched recesses called *arcisolia* (see *ARCISOLIUM*). Besides these, there are distinct chambers opening out of the passages

called *cubicula*, in the sides of which ordinary loculi were cut. There were also larger chambers which were used as places of meeting and for worship; one catacomb contains a large and complete church, with nave and aisles, apse and narthex. In some catacombs there are several distinct series of galleries at different levels.

In later times oratories and churches were erected over the entrances to the principal catacombs with more convenient access, thus St. Peter's was built over the cemetery of the Vatican.

The catacombs are rich in inscriptions, sculptures, paintings and utensils of great beauty and extraordinary interest. (Murray's *Handbook of Rome*.)

CATHEDRAL (from *καθέδρα*, a seat). A church in which there is the throne of a bishop.

CATHERINE - WHEEL WINDOW. A circular window with mullions radiating from the centre. (See **TRACERY**.)

CAULICOLE (*pl.* CAULICOLI). A stalk; in the Corinthian capital* the thick stalk (of which there are two on each side of the capital) from which spring the leaves which support the volutes.

CAVETTO. See **MOULDING** (fig. 178).

CEILING. In the middle ages church ceilings were either of stone vaulting* or of wood in imitation of vaulting; or they were plastered or boarded and followed the cants of a trussed rafter roof,* forming a sort of polygonal tunnel; this was sometimes divided into square panels by small ribs and decorated with gilding and colour. In domestic buildings the most common plan for the lower rooms seems to have been to mould the joists of the floor above, and either to let the floorboards be seen from below or to plaster them. The

* See article thereon.

plaster was laid on a mass of reeds. In the time of Elizabeth the ceiling was covered with a rich pattern in plaster work, forming panels of various shapes, enriched with scrolls of vine in low relief. In the seventeenth century the pattern was given up, the ceiling was formed into coffers* or into a few large divisions consisting of a central circle, oval or other form with smaller panels disposed round it, the decoration consisting of acanthus, lotus and so on, in bold relief, and the usual mouldings and enrichments.

CELL. (1) A small room in which to confine a prisoner. (2) A small chamber or set of chambers for one occupant in a religious house; in England required only by the Carthusian Rule. (3) A small religious house, the offshoot from a larger house, and continuing in some respects in subordination to it.

CELLA. The part of a Greek or Roman temple* which was enclosed by walls.

CELLAR. Now an underground room used for storage, but in the middle ages a store-room often entirely above ground.

CEMETERY (from Greek, a sleeping-place). The practice of associating a burial ground with a place of worship appears to be of Christian origin. The churchyard usually lay to the south of the church; it was entered through a lych-gate* and contained a large cross.*

CENSER OR THURIBLE. A small metal cup hung on chains and with a perforated cover, in which to burn incense.

CHALICE, COMMUNION CUP. A cup for the sacramental wine. In 847 it was ordered that chalices should be of gold or silver. The examples of the twelfth and thirteenth centuries have a bowl of a flat

* See article thereon.

hemispherical form, a knob in the centre of the stem, and a round foot. In the fourteenth century the bowl becomes conical and the foot is a hexagon with concave sides (fig. 51 *a*). Towards the close of the fifteenth century the bowl is more hemispherical, the tendency continues in the reign of Henry VIII., and the foot has six convex lobes. A chalice, generally of tin or pewter, was placed on the breast of every priest at his burial. Orders for the destruction of 'chalices' and for the provision of 'communion cups' were issued during the reigns of Edward VI. and Elizabeth; in consequence of the inquiries by Archbishop Parker many cups were

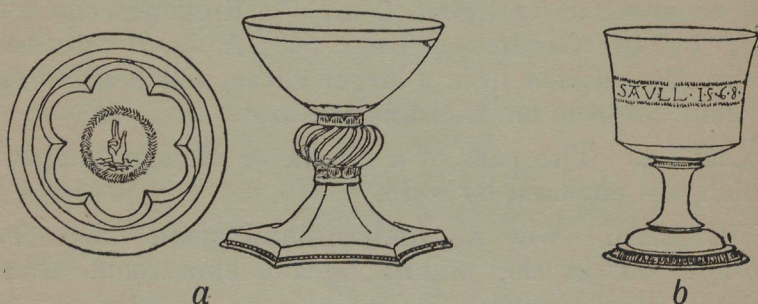


FIG. 51. *a*. CHALICE AND PATEN. *b*. COMMUNION CUP

made in or about 1570 (fig. 51 *b*). The bowl is larger than that of the chalice as the wine was now received by the laity; it is cylindrical with a swelling lip, and is often inscribed with the name of the parish; the stem is concave and the foot a very flat dome with mouldings. At the beginning of the following century a cup with a somewhat conical bowl and a baluster stem was in vogue for a time. From 1630 to 1640 (cr.) the bowl was tumbler-shaped and the stem of the form of a trumpet with the mouth downwards. In the latter part of the seventeenth century and during the eighteenth century cups were shaped somewhat like the Elizabethan cup but taller and plainer, often very rude and of enormous size.

CHAMFER. A plane formed by cutting off the edge made by two surfaces.

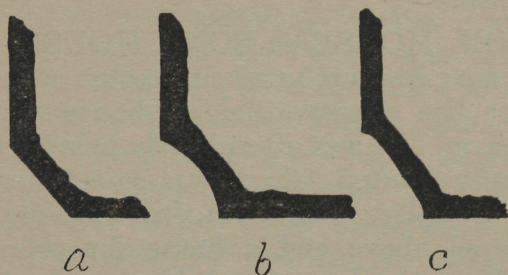


FIG. 52. THE CHAMFER

a Plain chamfer. *b* Hollow chamfer. *c* Sunk chamfer

CHANCEL. The part of a church which in the middle ages was separated from the rest by a screen. The word is derived from Latin *cancellus*, a lattice-work screen; compare cancel, chancellor, etc., (s.).

CHANTRY. An endowment for the singing of masses for the dead.

CHANTRY CHAPEL. A chapel, generally consisting of an enclosure within a church, provided for such masses.

CHAPEL (Low Lat. *capella*, orig. a shrine in which was preserved the *capa* or cope of St. Martin,—s.). (1) A small church other than a parish church or conventual or cathedral church, such as in the middle ages had “no proper priest attached to it or in which the sacrament of baptism was not to be administered or had no burying ground annexed to it or which was dependent on a superior church” (p.). (2) A church for the particular use of a college* or other similar body or of a household (*see* HOUSE). (3) A small building attached to a larger church, or to a particular part of a church or monastery,* and used for a special purpose or dedicated to some particular saint. (4) A building provided for the services of Nonconformists.

* See article thereon.

CHAPTER-HOUSE. A room in a monastery* or attached to a cathedral for meetings of the chapter or governing body.

CHARNEL HOUSE or **BONE HOUSE.** A building in or near a churchyard and often attached to a church, for the preservation of bones disturbed in digging graves. It was often partly below ground and was generally vaulted; there was sometimes a chapel over it. Examples: The Cathedral School, Norwich, with a chapel above and a house for priests to the west; St. Mary the Less, Cambridge, under the vestry.

CHECKER. The office of one of the obedientiaries or heads of departments in a monastery. So called from the checker or chequer pattern marked on the table on which accounts were reckoned by means of counters; or abbreviated from *exchequer*, which has the same derivation (s.).

CHEQUER-WORK. Walling built of two materials, usually flint and stone or brick and stone, so arranged as to make a chess-board pattern (fig. 53). The construction, and perhaps the appearance also, is improved by making the stones longer than the blocks of other material, so that they overlap and the 'straight joints' are avoided, as shown on the right of the figure.

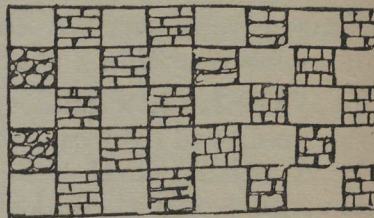


FIG. 53. CHEQUER-WORK

CHEST. An important piece of furniture in the middle ages in which was kept bulky goods such as clothing and also money; hence an endowment or fund was called a chest. In early times to the thirteenth century the woodwork was generally very simple and was strengthened with ornamental ironwork (fig. 124); in the fourteenth and fifteenth centuries the woodwork

* See article thereon.

was more elaborate, being panelled and decorated with tracery and carving and sometimes with paintings, and the ironwork was simpler; in the sixteenth and seventeenth centuries the work was much plainer, consisting of moulded panelling, plain or ornamented with shallow and poor carving. The rude chests with barrel-shaped lids often seen in churches are believed to be generally of the sixteenth or early seventeenth centuries. The medieval chest, as for instance, the chest for parish registers, was often secured by two, three or more padlocks, the keys being kept by different persons, and many ingenious contrivances were resorted to for concealing the keyhole and so forth.

CHEVET. An apsidal east end of a church,* in which the aisle is continued round the end of the presbytery, with chapels radiating from it. A form common in France and introduced into England at the Conquest but soon abandoned by the English; adopted by Henry III. at Westminster Abbey (fig. 66) but without effect on the national style.

CHEVRON. A Norman enrichment formed by two zigzags deeply cut (fig. 190); not to be confounded with the shallow zigzag.* Compare chevron, an heraldic bearing and (Fr.) a pair of rafters.

CHIMNEY, CHIMNEYPiece, FIREPLACE. It appears that before the Conquest the fire was invariably in the middle of the room and that therefore there were no chimneys. In Norman castles and houses these are fairly common. In the twelfth and thirteenth centuries the recess was generally shallow and the smoke was caught by a projecting hood or mantle (whence 'mantel-piece') carried on corbels and sloping back to the wall; they were generally at the side of the room, so that a tall chimney-shaft rose

* See article thereon.

from the eaves of the roof. In the fourteenth century the same form continued, though the work was rather more elaborate; the chimney-stack was sometimes short and rose from the gable, and was commonly octagonal; it is frequently crowned with a spire and has openings at the side for the escape of the smoke. In the fifteenth century the hood was gradually discarded and the lintel of the fireplace becomes highly ornamental. The recess is commonly about six feet wide. It is remarkable that generally the hall had still a central hearth, even when every other room in the house had a fireplace at the side; if the hall had a side fireplace it was large, often 12 feet wide. Towards the end of the fifteenth and at the beginning of the sixteenth century clustered chimneys became common, each flue in the stack being taken up a separate shaft, which was often richly decorated (fig. 54). Hitherto the flue had been excessively large, being the whole width of the fireplace recess at the bottom and gradually narrowing as it rose. The fireplace became much smaller but more elaborate

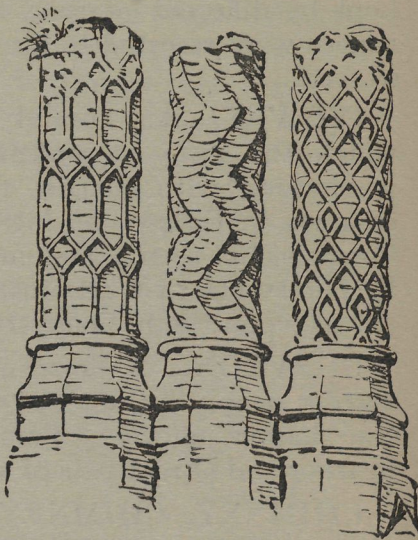


FIG. 54.
CHIMNEY-STACK. TIME OF HENRY VIII

in the latter part of the sixteenth century and in the seventeenth, and the chimney-stack was simpler, being generally a group of plain octagons and squares. In the eighteenth century the use of iron grates brought about a further reduction in the size of the fireplace, and the chimney-stack ceased to be an architectural feature.

CHOIR. Strictly the part of a church occupied by the singers, the part east of this being the presbytery. The term is often applied to the whole of the eastern limb and also to the whole of the space east of the great screen. In cathedrals and monastic churches the choir includes a large part of the nave.

CHOIR SCREEN. See **SCREEN.**

CHURCH. (Greek *κυριακός*, belonging to the Lord, s.). The English church plan is the result of a gradual development from two primitive types, one of southern, the other of northern origin. These types are generally known as the Basilican and the Celtic. It will be necessary to give some account of these before describing their introduction into England and their effect on English architecture.

The Basilican church varies in some important respects in different examples, but the normal plan may be thus described. The building consists of a nave with one or sometimes two aisles on each side, with spacious galleries for women above them. It is entered from the east, as will be more particularly noticed presently. At the west end of the nave there is a semi-circular apse forming the presbytery, with a stone bench for the clergy round it, the middle seat being a raised chair for the bishop. In front of the bishop's chair, and nearly on the chord of the apse, is the altar. The western part of the nave is enclosed by screens (*cancelli*, whence our word 'chancel,'*) and forms a quire for the singers. The presbytery, and perhaps the quire, are raised considerably above the nave over a crypt called a *confessio*,* the burial-place of saints (figs. 55, 56). There are two entrances from the church to the *confessio*, and if possible there is a window in the wall between the *confessio* and the nave. There are sometimes transepts; in some cases these are as long as the nave, while in

* See article thereon.

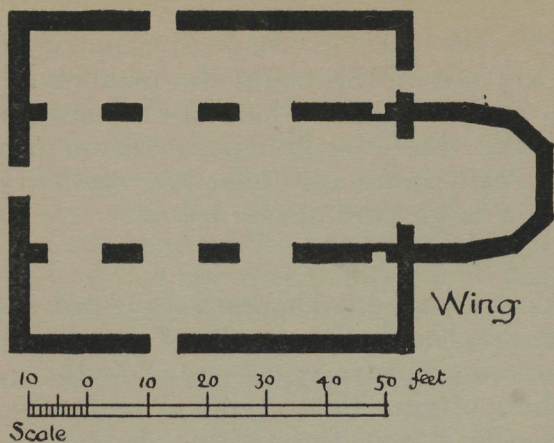


FIG. 55
BASILICA PLAN
WING

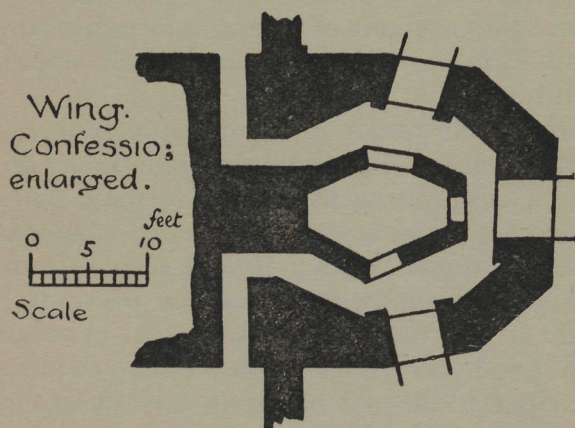


FIG. 56
PLAN OF CONFESSIO
WING

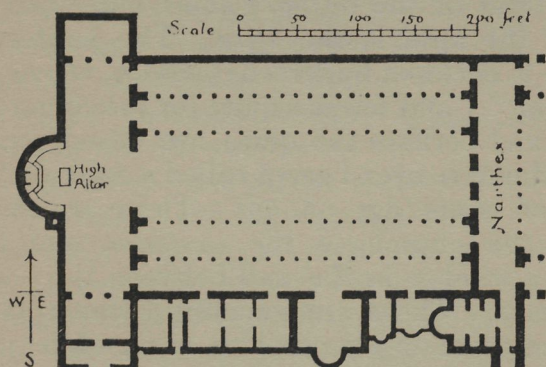


FIG. 57
BASILICA PLAN AND
WESTERN ALTAR
OLD ST. PETER'S, ROME

others they hardly project beyond the aisles. The church is entered by three doors through a *narthex** or large porch extending across the east end. On this side of the church there is a forecourt surrounded by a cloister and with a laver in the middle. Occasionally the entrances to the church are at the sides and there is an apse at the east end as well as at the west.

The development of this plan in its main outlines may be traced back to several sources, but the exact degree to which it was influenced by each of these is still a matter of dispute. It has a general resemblance to the secular basilicas,* or large halls, both public and private, of the Romans.

When at the end of the third century and in the time of Constantine the increased number of converts made large buildings necessary, the simplest way of providing them was by a hall with nave and aisles, with a gallery over the aisles and with a clear-storey, like the secular basilicas and other pagan buildings. The apse with its seats and altar had without doubt long since become stereotyped. The cloistered forecourt had always been familiar in the *atrium* of the private house. The alcove* or *cella* erected in the cemetery outside the town over the tomb of the saint, was rebuilt as a *confessio*, when the great numbers who visited the spot made it necessary to provide a large church. The end of the church at which the apse was placed was sometimes enlarged by the addition of transepts, thus forming a T-shaped plan (fig. 57), from which the cruciform plan was afterwards developed; thus in this as in so many other instances, a symbolical meaning was attached to what was at first purely practical and utilitarian. The great halls of palaces as well as public buildings had been called basilicas, and the term was applied to the typical church plan early in the fourth century.

* See article thereon.

The Basilican church plan was introduced into England by the Romans. A good example of a small church is that at Silchester, though unfortunately only the foundations and part of the pavement remain (fig. 58). It consists of a nave with an apse at the west end, aisles, transepts and a narthex or portico. The foundation-walls between the nave and aisles

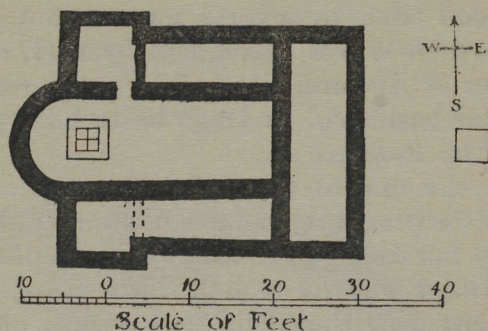


FIG. 58. ROMANO-BRITISH CHURCH, SILCHESTER

doubtless supported a row of columns, but one at least of the transepts appears to have been separated by walls from the rest of the church; the narthex probably was an open portico with three doorways leading into the church. The pavement is a mosaic of *tesserae* made of red tiles cut into one-inch squares in the manner common in Roman work. In the middle of the apse however there is a square with a pattern of black, white and red *tesserae*, on which stood a wood altar. To the east of the church there was a laver at which the worshippers washed before entering, and near it was a well. There are no distinct remains of the *atrium* which, it has been suggested, surrounded the church instead of lying to the east of it as usual (H.).

The eastward position of the entrance is an arrangement which the earlier Christian churches share with

the places of worship built by peoples of other faiths (*see* ORIENTATION). The subsequent turning round of the church is involved in obscurity. It has been suggested that churches with two apses were fairly common (fig. 59), and that the western apse, which had originally contained the high altar, was gradually superseded in importance by the east apse, and that then its altar was moved to the east part of the nave.

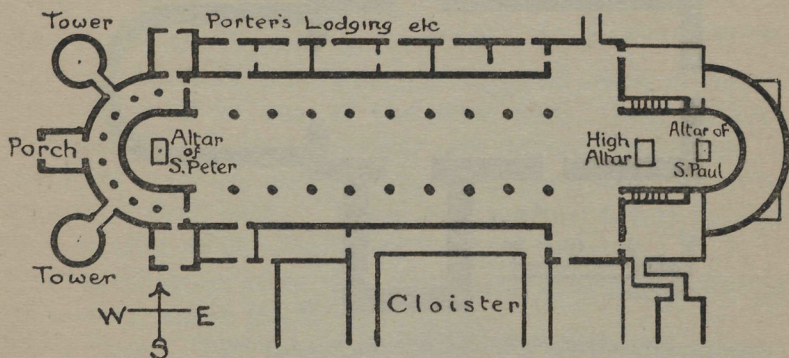


FIG. 59. CHURCH OF BASILICA TYPE, ST. GALL

The cruciform plan was, it would seem, developed in England more or less independently of, though no doubt influenced by, the Continental development. The north and south porches were not porches only, but also contained altars. These projecting wings, it has been argued, were then moved farther east and their outer doors omitted, thus forming small transepts (fig. 60) with very narrow arches towards the nave (M.). The Basilican plan was again introduced in 598 by St. Augustine.

Something must now be said about that other, and perhaps more important, influence on English church architecture, namely, the Celtic tradition.

The Irish church has worked out for itself a simple

but quite definite system of architecture. Its buildings were a development, it would appear, of a pagan cell or tomb, circular in plan, and in section of the form known as 'bee-hive,' that is with a stone roof

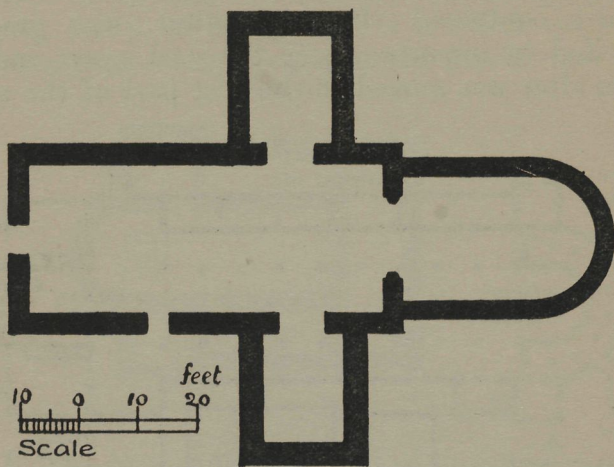


FIG. 60. TRANSITIONAL PLAN, WORTH

made by corbelling out every course beyond the one below it till the opposite sides met at the top. This cell the Christians gradually made square in plan. Sometimes there is an oblong sanctuary at the east end; this perhaps originated in a rectangular recess for the altar. The towers are narrow and lofty.

St. Aidan and his fellow-missionaries arrived in Northumbria from St. Columba's Irish settlement in Iona in 635, and were established at Lindisfarne. They naturally continued to build in the style to which they had been accustomed, and the tradition was carried on by the great building abbot, Benedic Biscop, and to some extent by St. Wilfrid, in the latter half of the century. Their churches are small and without aisles, they have a square-ended chancel opening into the nave by a narrow archway (fig. 61). There are

often side porches and a western tower. This northern influence was far more widely felt and of greater permanence than that of St. Augustine, although coming thirty or forty years later.

In the second half of the seventh century the Basilican and Celtic types were combined into something of a compromise, with a balance in favour of the Celtic. The apse is abandoned for the square presbytery; the tall west tower is adopted; side entrances are preferred to one at the west end. The *confessio*, the result of the peculiar conditions at Rome, is dropped; nor are aisles required in such small churches as are at first built. There is a central tower in addition to that at the west end in some cases.

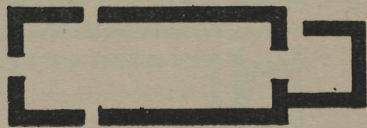


FIG. 61. THE CELTIC PLAN, ESCOMB

Immediately after the Conquest Norman influence of course made itself felt for a time. The apse appears again (fig. 62); sometimes even the smallest churches have a central tower and often transepts; also the western door becomes more common.

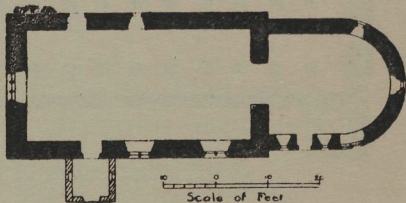


FIG. 62. THE SMALL NORMAN CHURCH, BENGEIO

Two types of east end were introduced by the Normans. In one the aisle is carried round the apse, and from it chapels project, as at Norwich (fig. 63). This plan which came to be called a *chevet* continued, with modifications, to be the typical French ending (fig. 66). The other or Normandy type has a Lombardic, and perhaps ultimately an Oriental origin (fig. 64). The aisles terminate in apses on a line with the chord of the great apse. Outside these short aisles project from the transepts, and beyond these

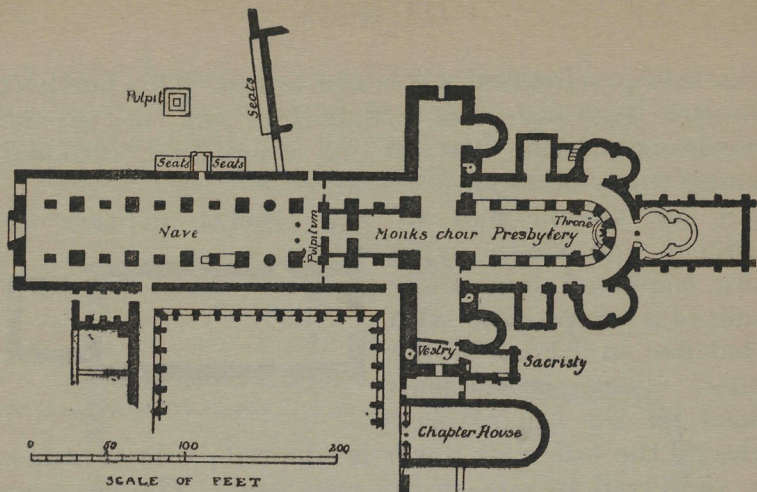


FIG. 63. THE CHEVET, NORWICH

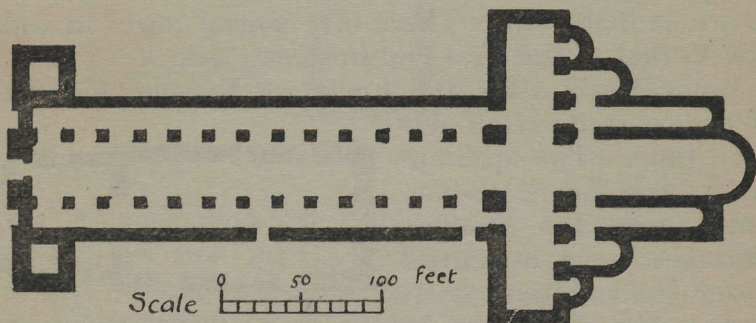


FIG. 64. PARALLEL APSSES, ST. ALBANS

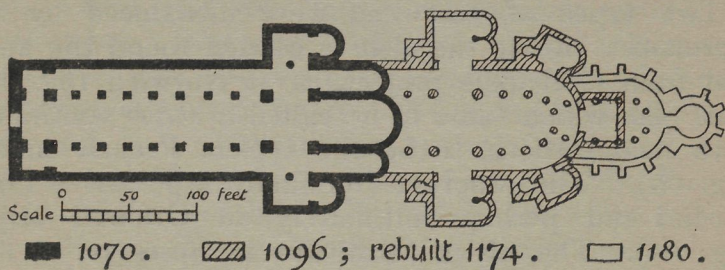


FIG. 65. THE TWO TYPES OF APSE AND THE EASTWARD EXTENSION, CANTERBURY

again other apses. St. Albans is given as an instance. The English however soon abandoned both these types in favour of the indigenous square east end, and also at an early period began to lengthen the presbytery (fig. 65.)

The vast Norman naves on the other hand have been little altered, and they have to a great extent given the keynote to work of a later period. This is especially noticeable in the proportions of the three storeys of the building: main arcade, triforium and clear-storey. The Norman church still gave to the triforium that importance which it had inherited from the basilica. When a presbytery was rebuilt or lengthened the same proportions were preserved, so that the new work might range with the old. A tradition was thus established which influenced English design even where, as at Salisbury, there was no earlier work to hamper the artist. Consequently in England the triforium dies hard. But it does gradually dwindle, is incorporated with the clear-storey as a mere wall passage and finally disappears.

The east end retained for some time after the Conquest something of the Basilican arrangement; the altar was placed somewhat in advance of the apse; behind it were ranged the seats of the clergy; the central seat was considerably raised and was reached by a flight of steps, which projected in a semi-circle towards the west. The arrangement probably continued till the general enlargement of presbyteries in the thirteenth century, when the seats were moved to the south side of the altar (M.). In one instance only, namely Norwich, are the remains of the ancient throne preserved *in situ* (fig. 63).

The choir of the monks or canons occupied the crossing and several of the easternmost bays of the nave (figs. 63, 66). The screen which separates the choir and nave varies in its details in different

examples. In its simplest form (for the monastic and cathedral churches) it consisted of the following parts. (1) A wall against which the choir stalls are 'returned' and in the centre of which there is a doorway. (2) A second wall one bay further west, also with a doorway

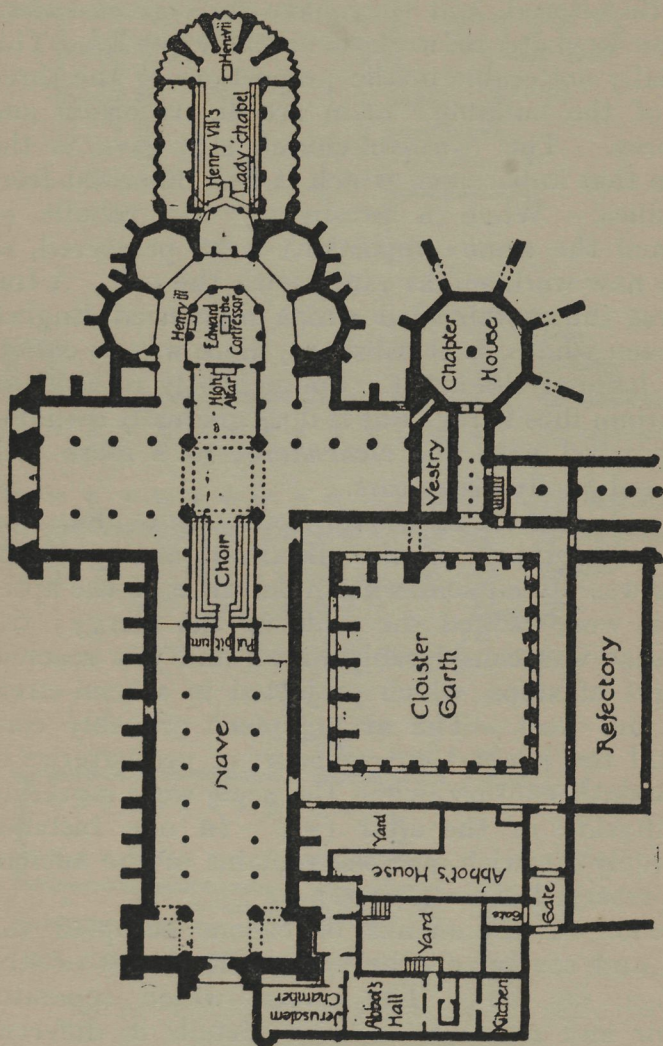


FIG. 66. THE FRENCH PLAN. WESTMINSTER ABBEY
SCALE: Three-quarters of an inch to one hundred feet

in the centre ; the space between these two walls was covered by an upper floor forming a gallery or loft called the *pulpitum*, supporting the great cross or rood and containing the organs. (3) A screen wall one bay further west forming a reredos to the principal nave altar on each side of which was a doorway.

In the ordinary parish churches a variety of causes have led to a gradual and remarkably uniform series of alterations. The first of these was the substitution of a square east end for the apse. The removal of the central tower generally followed next, the reason in most cases perhaps being that it had become unsafe, though the fact that it was never rebuilt in the same place seems to indicate a change of fashion ; the new tower was almost invariably built at the west end of the nave. As the population grew it became necessary to add an aisle if, as was more commonly the case, the Norman church had not aisles. It was usually more convenient to do this on the north side because there were more graves to the south. The aisle wall was built first and then the arches were made, being often cut through the nave wall without taking it down. Thus it comes about that the upper part of the wall is sometimes older than the arches. Soon it was found necessary to enlarge the building still further, and a south aisle was built in the same way ; then the aisles were made wider, and as this required a corresponding increase of height, flat lead roofs were put over them level with the eaves of the nave roof, and so we find the small, early clear-storey windows of the nave look into the aisle ; a new clear-storey was then built above the old one.

In the aisleless church there had been, at the end of the nave, an altar enclosed by screens on each side of the chancel arch. Sometimes the altar stood against the chancel screen. When aisles were added these altars were moved into them and enclosed by screens ;

the marks of the screens are always visible on the responds and on the first columns. Finally, the aisles were often continued up to the extreme east end and arches made through into the chancel. One of the chancel aisles, or a part of it, was sometimes used as a sacristy in which were kept the vessels and vestments and other things required in the service. When the chancel has not aisles there often still remains on its north side a sacristy, which also generally contained an altar. There is sometimes a vaulted chamber below it, half underground, in which might be placed any human bones disturbed in making graves or in digging the foundations of any additions to the church. (*See CHARNEL HOUSE.*) Over the porch there is very often a chamber communicating by a winding staircase with the church. Its uses seem to have been various; sometimes it appears to have contained an altar, but more often to have been a living-room, presumably either for a priest or for the guardian of the church, and it is not unlikely that it was used for occasional meetings and other purposes.

The first of the changes made in churches during the sixteenth century was the destruction of the rood with images, relics and shrines in 1541. The suppression of the gilds and chantries in 1545 and 1547 caused the discontinuance of many services and ceremonies and the extinguishing of the lights which had been maintained by the payments of the gild brethren and by the chantry endowments. Candles were definitely forbidden by the Injunctions of 1547 except two upon the altar, and these appear to have been disallowed soon afterwards. A pulpit was to be provided and the Epistle and Gospel were to be read from there or other convenient place. It would seem that it was at this time that the Royal Arms were first put up.

In 1550 orders were issued to destroy all altars, and to provide one table in their stead. It appears that

texts from Scripture were painted on the walls in place of the destroyed pictures, for in the reign of Queen Mary orders were issued (1554) that these should be obliterated. The old ornaments were then of course restored so far as possible, with "a rood of a decent stature, with Mary and John and an image of the patron of the same church."

In the first year of Queen Elizabeth injunctions very similar to those of Edward VI. were issued. The open decay and ruin of churches at this time (1560) is described in a letter issued by the Queen, in which she instructs commissioners to determine some means of reformation, "and among other things to order that the tables of the commandments may be comlye set or hung up in the east end of the chauncell." The old service-books were ordered to be defaced and abolished in the following year.

In 1569 Archbishop Parker issued inquiries as to whether baptism was ministered in a bason or in the font, and "whether the roode lofte be pulled down according to the order prescribed; and if the partition between the chauncel and church be kepte."

The position of the altar or communion table was still a burning question in the reign of Charles I. Laud decided in favour of altars as against tables. He also introduced altar-rails* and the credence.* His party were accused of taking down galleries, some of which had been built early in the seventeenth century, and of restraining the building of them in parishes which were very populous.

During the Civil War and the Commonwealth the ornaments and other improvements introduced by Laud, and also much of the older work which the first reformers had spared, were destroyed.

After the Restoration matters improved, but the process of repair was very slow in the poorer villages,

* See article thereon.

and for years afterwards many churches were reported to be in a state of ruin. The most characteristic work of the eighteenth century is seen in the high pews, the west gallery for the choir and band, and the 'three-decker—clerk's desk and seat, parson's desk and seat, and pulpit—forming a strange but often picturesque composition.

CIBORIUM. A canopy supported on four columns over an altar. (*See* BALDACHINO.)

CINQUE-CENTO. Lit. five hundred. A short expression for the century which began in 1501, used especially in connexion with art.

CINQUE-FOIL. A five-leaf form in the head of a window or in a circle produced by cusping.*

CLEAR-STOREY (also spelt clere-storey but pron. clear storey). A part of a building lighted with windows above the roof of some other part, e.g. in a church the windows of the nave which are above the aisle roof.

CLOISTER. Lit. an enclosure. A covered way, open at the sides, round a court, as in a monastery. The monastic cloister was introduced into England with monachism from Italy. It was the place of study, and in short the living-place of the monks. For such a purpose, though quite suited to the Italian climate, it was singularly unsuitable to that of England. At first it was enclosed by a low wall on which stood columns of wood or stone, single or in couples, supporting arches or lintels carrying a lean-to roof. Probably all Norman cloisters were of this character. The form of the arches changed as architecture advanced and were converted into windows with stone tracery but without glass. Not till the thirteenth and fourteenth centuries, and in some cases perhaps not till the fifteenth century, were the windows entirely glazed.

* See article thereon.

The alleys, ambulatories, panes, or walks, as they are called, of the cloisters of the larger monasteries were also vaulted in later times. The cloister served the several purposes of a passage connecting the various buildings, a place of study for the monks (*see* ARMARIUM, CARRELL, LIBRARY) and a place of instruction for the novices. There was a stone seat against the wall on which are often to be seen the marks of the 'morris' game, a sort of 'fox-and-geese.' Burials were sometimes made in the alleys of the cloister, but never in the cloister-garth till after the Reformation.

CLOISTER-GARTH. The space enclosed by the cloister.

CLUSTERED COLUMN. A group of small shafts surrounding a large column,* much used in the thirteenth century.

COB-WALL. A wall built of blocks called 'clay-bats' made of unburnt clay or chalk mixed with straw.

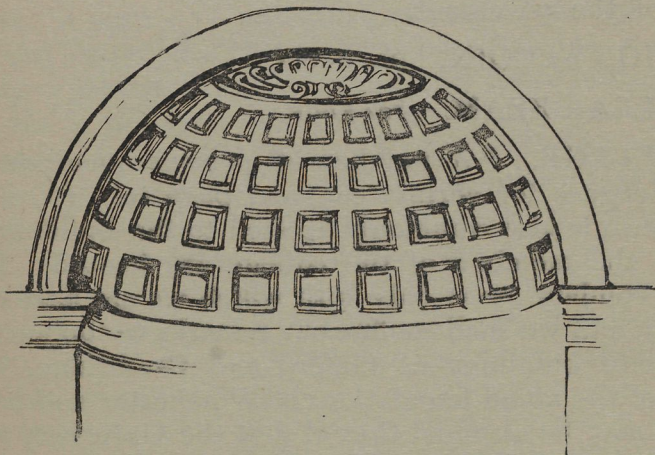


FIG. 67. COFFERED HALF-DOME

COFFER. (1) A chest.* (2) A lacunar or deeply-sunk panel in a ceiling, vault or dome (fig. 67) origin-

* See article thereon.

ally formed by the beams of a ceiling crossing one another.

COFFIN. In the middle ages coffin meant coffer, from which word it is derived. "Burial in a coffin was the exception, but many churches had one with a hinged lid which used to be lent to bring bodies to the grave in" (M.). Stone coffins may have been comparatively common, as their sculptured lids, mostly of the thirteenth and fourteenth centuries (fig. 68), have been so often found, though some of these may be merely gravestones. Stone coffins, it is said (P.), were never deeply buried and were frequently so close to the surface that the lid formed part of the pavement.

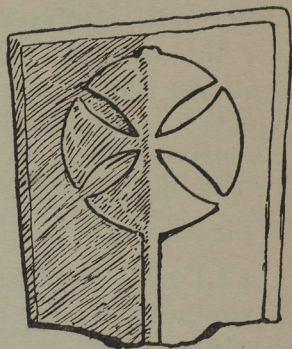


FIG. 68. COFFIN LID
LITTLE SHELFORD

COIGN OR COIN. *See QUOIN.*

COLLAR-BEAM. *See ROOF.*

COLLEGE. "A number of persons incorporated as colleagues for certain common purposes" (W. & C.). The term is also commonly applied to the buildings in which the members of the college are housed. It is this secondary sense only with which we are here concerned, and we shall confine our remarks to the ancient collegiate buildings of Oxford and Cambridge, with those of the allied foundations of Winchester and Eton.

"It may be assumed that at first the University took no cognisance whatever of the way in which students obtained lodgings. The inconvenience and discomfort of this system soon led to the establishment of what were afterwards termed Hostels, apparently by voluntary action on the part of the students themselves"

(w. & c.). These hostels were therefore mere private houses hired by the students, but before long they were to some extent regulated by the University authorities. A further step was made by the bequest to each University of sums for the maintenance of scholars, and by the purchase on the part of the University of Oxford of houses in which such scholars should live.

The collegiate system was however really inaugurated somewhat later by Walter de Merton, Lord Chancellor and Bishop of Rochester, who founded at Oxford in 1264 the college called by his name. His example was soon afterwards followed at Cambridge by Hugh de Balsham, Bishop of Ely.

In these two colleges and in all the early foundations the scholars were at first placed in already existing private houses, to which necessary additions, such as a hall and kitchen, were afterwards made. The devotions of the scholars "were performed in the parish church, their books were kept in a chest in the strong room, and the master . . . occupied an ordinry chamber, so that the chapel, the library, the master's lodge, and the stately gateways, which supply so many distinctive features in the later colleges, were wholly wanting in the earlier ones" (w. & c.). As the collegiate system developed these were gradually added and grouped round a rectangular court as convenience might require, until certain recognisable types of plan were evolved; a similar process was going on at about the same period in the analogous case of the manorial house. But neither college nor hall were started with the idea of a quadrangle.

It is to be noted that neither at its inception nor in its later development does the collegiate arrangement owe anything to monastic influence. The fact that we have two communities each living a life in common might lead us to expect a similarity of plan in their buildings, but a little consideration will show that there

were many points of divergence. A convent began by building the church, but a private chapel was not contemplated by the founders of early colleges and was generally the last thing to be added; colleges did not require a chapter-house nor a guest-house. In the one case all the inmates occupied a common dormitory and studied together in the cloister, while in the other the principle was adopted of dividing up the community

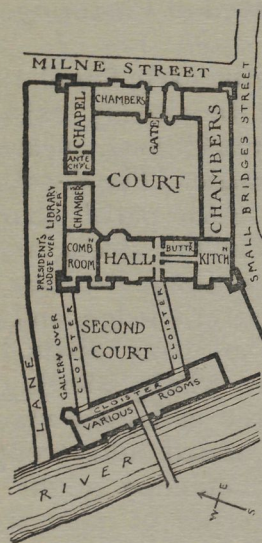


FIG. 69. THE CAMBRIDGE PLAN
QUEENS' COLLEGE

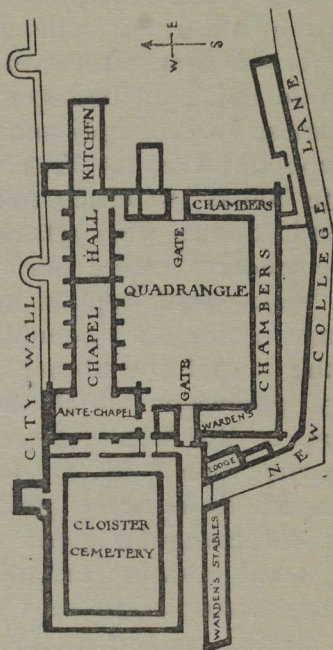


FIG. 70. THE OXFORD PLAN
NEW COLLEGE

into groups of about four students who, under the care of a senior, occupied a single room both as a sleeping-place and for study. And finally the student had, before the foundation of colleges, learned habits of independence unknown to the monk. The requirements of a

college, therefore, more nearly approached the requirements of the large private establishment of a great manorial lord than those of a monastery.

As the college plan became fully developed the resemblance to the manor house became very marked. This was especially the case at Cambridge. The strong likeness between the plan of Queens' College (fig. 69), founded in the middle of the fifteenth century, and that of Haddon Hall in Derbyshire (fig. 71) is very striking.

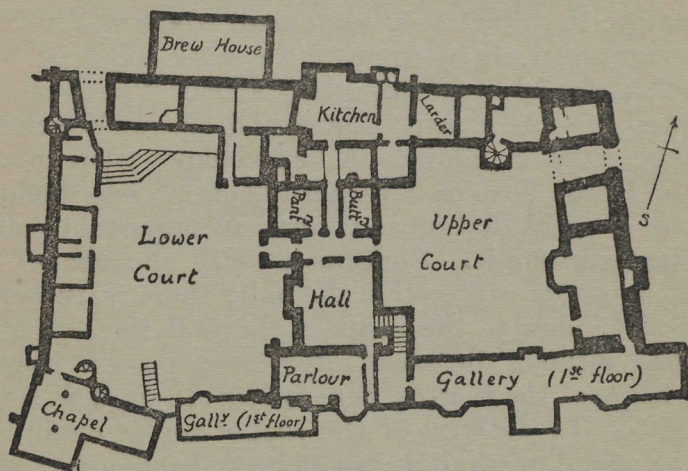


FIG 71. HADDON HALL

Both are built round courts. The hall is on the opposite side of the court to the gateway; at one end is the 'screens passage' with buttery and kitchen beyond; at the upper end of the hall are the common parlour and master's lodging, in a position analogous to that of the solar or withdrawing-room of the private house. The library is in proximity to these, and beyond it is the chapel which occupies a part of the north side of the court as at Haddon. A second court on the other side of the hall was subsequently formed by the addition of other buildings, the most remarkable of which

was the long Elizabethan gallery attached to the master's lodge, built in imitation of those which were being added at that time to large private houses. St. John's College was almost the counterpart of Queens', and other colleges had the same arrangement but have since been altered.

At Oxford the similarity to the manor-house is not so close. The building of New College (fig. 70) by William of Wykeham in the latter part of the fourteenth century on a very original plan formed a new departure in collegiate arrangement which was followed in several respects by some of the later colleges. The principal features of this plan, which Wykeham also adopted to some extent in his foundation of Winchester College, were as follows. A large chapel, with an ante-chapel in the form of a western transept, was included in the original design and forms an important feature in the quadrangle. Continuous with the chapel and abutting on its east wall is the hall; there is, therefore, no east window to the chapel. Beyond the hall is the kitchen without the usual intervening screens passage. The lodge of the master, here called the warden, is near the gate. To the west of the chapel and separate from the principal quadrangle is a cloistered cemetery. Each of these features was a departure from the normal arrangement. The plan was copied, in respect of the relative positions of the chapel and hall, at St. John's, All Souls' (in a modified form), and Magdalen Colleges; the transeptal ante-chapel was adopted at All Souls', Magdalen, and Wadham; and the detached cloister cemetery at the colleges of All Souls' and Corpus Christi. King Henry VI. was strongly influenced by Wykeham's foundations in his college at Eton and his King's College, Cambridge; the latter was to have had a cloistered cemetery. Otherwise the influence of New College was not felt at Cambridge.

It remains to notice a few details. The early

colleges had made use of the parish church with which they were sometimes connected by a raised gallery; in one or two instances the parish church seems to have been rebuilt with a specially large choir to accommodate the members of the college. When colleges began to have chapels of their own they were fitted with stalls facing north and south like a choir.

The hall was very much like the hall of a private house. There were no rooms over it, and it had an open-timber roof with a louvre or lantern on the ridge for the escape of the smoke from the fire, which was generally on a hearth in the centre. The tables ran lengthways down the hall except the high table which ran across on a dais or platform raised one step above the general floor level. At this end of the hall there was an oriel or bow-window on one or both sides. At the other or lower end of the hall there was a wooden screen to cover the outer doors and the doors to the kitchen and buttery, and to allow passage through the building without entering the hall itself. Over this passage-way was a gallery.

The library* was not often a detached building, but consisted of a large room on the upper floor. It may usually be distinguished by its range of windows which are larger and more uniformly spaced than the windows of chambers.

The chambers were arranged in groups in such a way that a single staircase gave access to two rooms on each floor. The rooms were of fair size and ran through the building, so that they were lighted by windows on opposite sides. In each corner of the room wood partitions were put up so as to form a small rectangular closet which would serve as a study for a single scholar, the closets being lighted by windows somewhat smaller than those of the large chamber and staircases. The chamber served as a general living-

room and bedroom for about four persons. The senior who was placed in charge of the scholars slept in a large bed, while the boys who it must be remembered were mere children of fourteen or fifteen, had small truckle beds which could be pushed away under the larger one in the daytime. (Willis and Clark, *Architectural History of the University of Cambridge*.)

COLONNADE. A row of columns, generally applied to one bearing an entablature rather than arches.

COLUMBARIUM (Lat. *columba*, a dove). A pigeon-house.*

COLUMBARIA. A term applied to any small recesses resembling pigeon-holes.

COLUMN, PIER, PILLAR, SHAFT. Column and pillar may be considered as synonymous terms, including all varieties except very large piers; the term pier is usually applied to those large masses of masonry forming in fact short walls, such as the great divisions between the nave and aisles in a Norman cathedral; shaft is used in Gothic architecture for a very slender column.

Saxon columns are round and are sometimes ornamented with vertical or spiral flutes, or they are baluster shaped and are spoken of as 'turned,' though it may be doubted if they were actually shaped by that process; large piers are generally plain rectangular masses of masonry.

Norman piers are even more massive, and have merely a facing of ashlar with a rubble core; they are rectangular, either plain or with a series of recesses at the angles corresponding with the orders of the arch, or they are circular, or a combination of the circle and

* See article thereon.

square : round columns sometimes have spiral or chevron flutes ; in the nave arcades of a church piers of two patterns are often used alternately ; shafts are round and sometimes have an annulet in the centre.

In the latter part of the twelfth century piers are abandoned and true columns are built, that is they are composed of large blocks of dressed stone carefully laid, instead of an ashlar facing with a core of rubble. They are much more slender and are generally round ; in the nave arcade of a church round and octagonal columns are frequently used alternately.



FIG. 72. PLANS OF COLUMNS

In the thirteenth century this alternate arrangement is abandoned. Columns often are in the form of a quatrefoil of four semi-circles (fig. 72 *a*). In the Norman compound pier the shafts had been placed more often in recesses than on the face ; they are now grouped round a circular column (fig. 72 *b*) ; the small shafts are generally of Purbeck marble and about four inches in diameter ; they are connected with the central stone column by one or more annulets.

In the latter part of the thirteenth century and in the fourteenth century the grouped arrangement continued, but the shafts are of stone and are worked on the same piece as the central column (fig. 72 *c*) ; mouldings are also introduced (fig. 72 *d*), and both mouldings and shafts have fillets ; the general outline makes a square or a lozenge set diagonally to the general line

of the columns. The round column is less used but octagons are common.

In the fifteenth century the composition becomes meagre, the shafts are separated by wide shallow 'casement' mouldings corresponding with those of the arch (figs. 45, 73). Each shaft has a separate capital, the mouldings between them running up uninterrupted into the arch. The whole column generally makes a lozenge with the shorter diagonal from east to west. The simple column is comparatively rare.



FIG. 73
COLUMN OF
THE
FIFTEENTH
CENTURY

The Classical and Renaissance styles have no compound column. The large pier is a mass of masonry with pilasters or half-columns placed against it and is surmounted by an entablature. The column instead of being of uniform diameter throughout diminishes as it rises, and the rate of diminution gradually increases; thus the sides are convex. This counteracts the tendency the shaft would have to look concave when seen against a bright sky. (*See ORDERS.*)

COMMON-HOUSE. *See* CALEFACTORY.

COMMUNION-CUP. *See* CHALICE.

COMMUNION-TABLE. *See* ALTAR.

COMPOSITE ORDER. *See* ORDER, CLASSICAL.

CONDUIT. (1) A cistern. (2) A pipe for the conveyance of water.

CONFESSIO. A crypt for the burial of martyrs and saints under the presbytery of a church* (fig. 56). It has been suggested (B.) that shrines or alcoves were erected over the graves of early Christian martyrs in the neighbourhood of Rome, and that afterwards churches were built over these, and that thus a custom was established. There are many examples of confessios in Italy. They were introduced into England

* *See* article thereon.

with the Basilican form of church by St. Augustine (A.D. 598). They are partly below ground and partly above, so that the floor of the presbytery under which they were placed is raised considerably above that of the nave. The wall between the nave and confessio sometimes contains a window, and there is a staircase leading down to the confessio from the east end of each aisle. The confessio consists of a central place for a tomb, surrounded by walls or columns to support the vault; outside these there is a passage-way running round the confessio; in the outer walls there are recesses (*arcisolia*) for other tombs. This plan and the provision of the two staircases are probably an arrangement to allow for the convenient and rapid passage of large numbers of pilgrims. Examples may be seen at Wing, Bucks; Repton, Notts; Brixworth, Northants; Ripon; Hexham.

CONFESSIONAL. A small enclosure formerly called the 'shriving pew,' in which the priest sits for hearing confession. It is in use in Roman Catholic churches; it is usually of wood, and has a door in front and a small window on one or both sides for penitents to speak through. Nothing appears to be known of its form in England in the middle ages. "It seems to have been common in London, and existed in other places, but I do not think it was in general use. It is sometimes called the *shriving house* and the *shriving stool*. We do not know anything of its form beyond what is suggested by the names" (M.). But in the middle ages the word *pew** often meant a high enclosure, and does not preclude the idea of an erection like a modern confessional.

CONSECRATION CROSS. A cross carved or painted or otherwise marked on

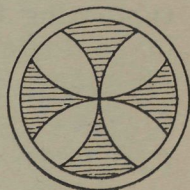


FIG. 74

INTERNAL PAINTED
CONSECRATION CROSS

* See article thereon.

the wall of a church and anointed by the bishop with holy water or oil at the consecration of the building. There were twelve such crosses inside (fig. 74) and twelve outside (figs. 75, 76).

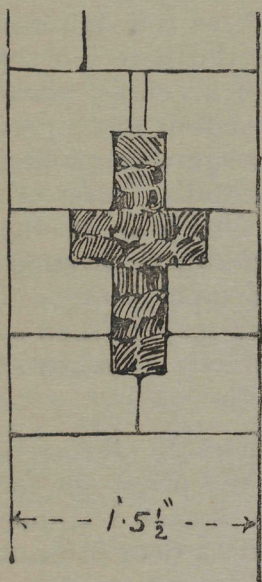


FIG. 75. EXTERNAL
CONSECRATION CROSS

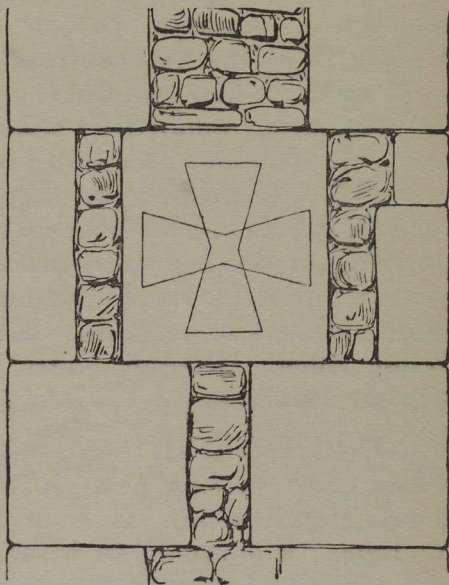


FIG. 76. EXTERNAL CONSECRATION CROSS
HELION BUMPSTEAD

CONSOLE OR **ANCON**. A deep bracket of slight projection, consisting of two reversed volutes supporting the end of the cornice of an Ionic doorway (fig. 77, and *see* **MODILLION**).

CONVENT, **CONVENTUAL CHURCH**. *See* **MONASTERY**.

COPING. A covering of stone or other material on the top of a wall to protect it from the weather.

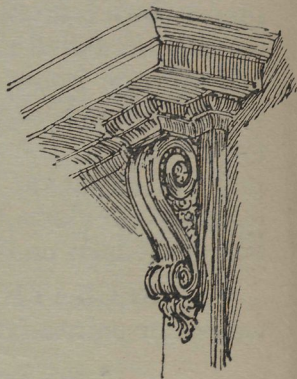


FIG. 77. CONSOLE

CORBEL. A projection from a wall, generally of stone, to carry a weight (figs. 78, 79).

CORBEL - TABLE. A row of corbels supporting lintels or small arches (fig. 80), generally used to carry a slightly overhanging parapet (*see also* MACHICOLATIONS).

CORBIE - STONES. (Scottish). The stones used for covering the stepped gables which were introduced from Holland in the seventeenth century (fig. 81, next page).

CORINTHIAN ORDER.

See ORDER, CLASSICAL.

CORNICE. The uppermost of the three parts of the entablature. (*See* ORDER.)

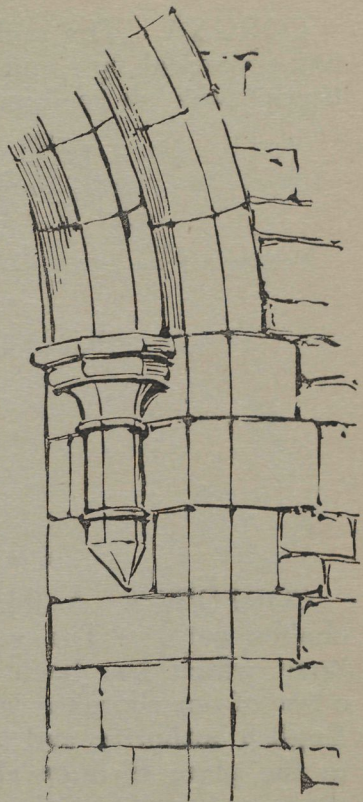


FIG. 78. CORBEL

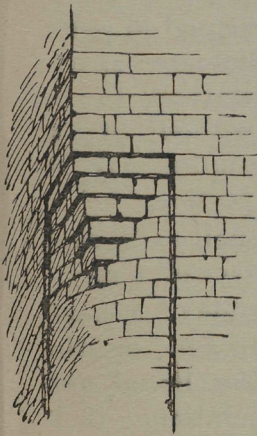


FIG. 79. BRICK CORBELLING

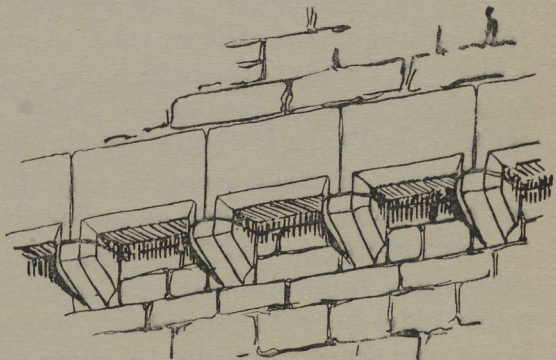


FIG. 80. CORBEL-TABLE

CORONA. The middle member of the cornice ; it has a vertical face and a wide horizontal soffit, sometimes 'sunk' or recessed. (*See ORDER, CLASSICAL*).

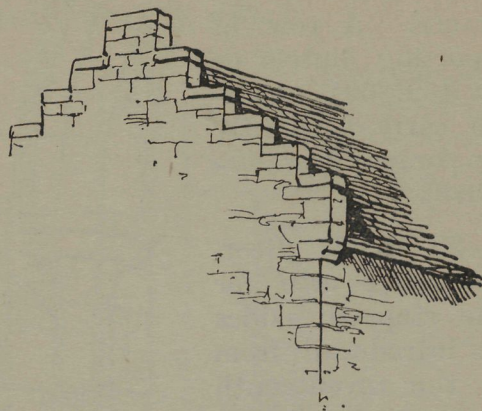


FIG. 81. CORBIE STONES

CORPORAS. A folded linen cloth to cover the chalice with. "The square of pasteboard cased in linen which has been introduced from abroad into a few of our churches lately and is called a pall has no English authority, and the use of pasteboard or paper in the place of linen about the Blessed Sacrament is contrary to some of the oldest canons" (M.).

COUPLED COLUMNS. Columns grouped in pairs. In the classical orders they are half a diameter apart ; this arrangement allows the other intervals to be wider than they otherwise might be without giving an appearance of weakness. Good examples may be seen at St. Paul's Cathedral in the west portico.

COVE. A large concave moulding such as is used in the cornice of a room or under the eaves of a roof.

CREDENCE. (Ital. *credenza*, a side table). A small table in a church near the altar, generally on the south side near the piscina.* On it the Bread and Wine are kept previous to their consecration. It is

* See article thereon.

rare in medieval churches, and even a shelf in the recess of the piscina, though not uncommon, is the exception, as it was the practice to place the elements on the altar at the beginning of the service. It was introduced into the English church by Laud. There are some seventeenth-century examples made of wood, now they are usually of stone.

CRENEL, CRENELLE. A battlement for defensive purposes. (*See* CASTLE, p. 35.)

CRESSET (lit., 'a cup for holding grease'—s). A small lamp in the form of a cup, of metal, stone, or earthenware, in which fat was burnt; used in churches in the middle ages.

CREST. Brattishing; * also ornamental ridge-tiling.

CROCKET. Probably the same word as crochet, a little hook; a hook-shaped bunch of foliage placed at intervals on the coping of a gable (fig. 82).

CROMLECH. A prehistoric building consisting of a stone of great size supported on others in a vertical position and partly sunk in the ground.

CROSS. The simple cross was used in the earliest times as the symbol of the Christian faith, the crucifix, or crucified figure, being a much later form. The cross has been used in Christian architecture in endless ways and of every variety of shape: carried in procession, placed on the altar and on the gable, painted on the walls to mark the places of the act of consecration, carved on gravestones; it formed the plan of the church,

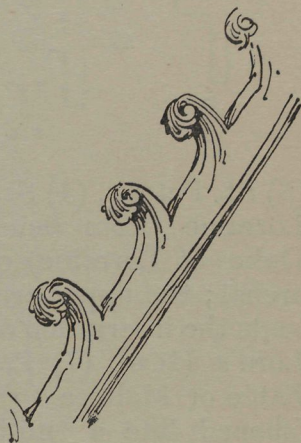


FIG. 82. CROCKETS
Thirteenth century

* See article thereon.

and it was set up in the churchyard, at the wayside and in the market-place.

The following are the various common forms of cross (fig. 83): 1 Greek or St. George's, (2) Latin,

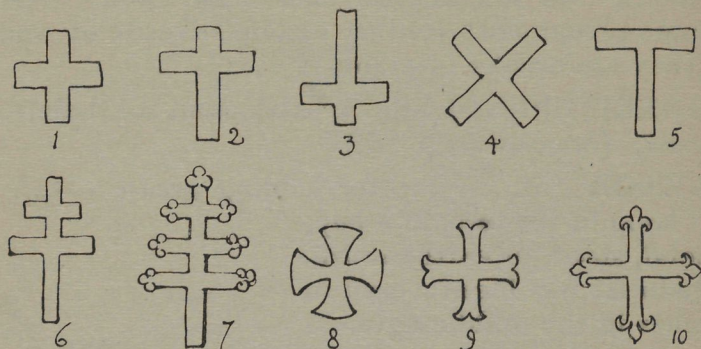


FIG. 83. TYPES OF CROSS

(3) St. Peter's, (4) St. Andrew's or Saltire, (5) Tau, (6) Lorraine (from being the armorial bearing of the Dukes of Lorraine) or Patriarchal; the upper arm represents the inscription over Our Lord's Head, (7) Papal, (8) Patée or Maltese, (9) Moline (shaped like a 'mill-iron'), (10) Flory.

CHURCHYARD AND WAYSIDE CROSSES. No doubt every churchyard had a cross of some sort, and probably they were mostly large and of stone. The cross usually stood, it would seem, on the south side of the chancel (the churchyard was usually south of the church). It consisted of a tall tapering shaft, per-

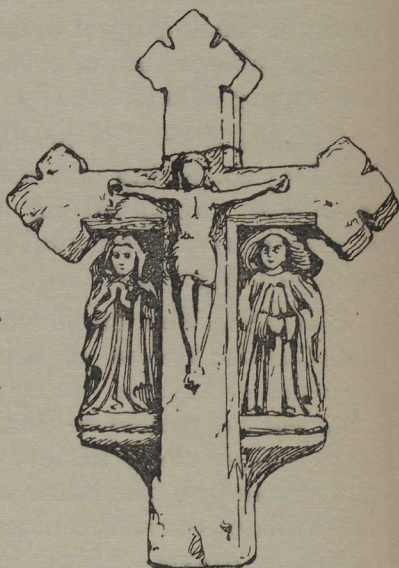


FIG. 84. HEAD OF A CHURCHYARD CROSS, REEPHAM

haps twelve feet high, raised on several steps and surmounted by a capital on which stood the cross proper, bearing the figure of Our Saviour and sometimes those of St. John and the Virgin on a bracket on each side (fig. 84), while on the reverse there was another subject. Wayside crosses appear to have been very numerous.

she doth stray about
By holy crosses, where she kneels and prays.

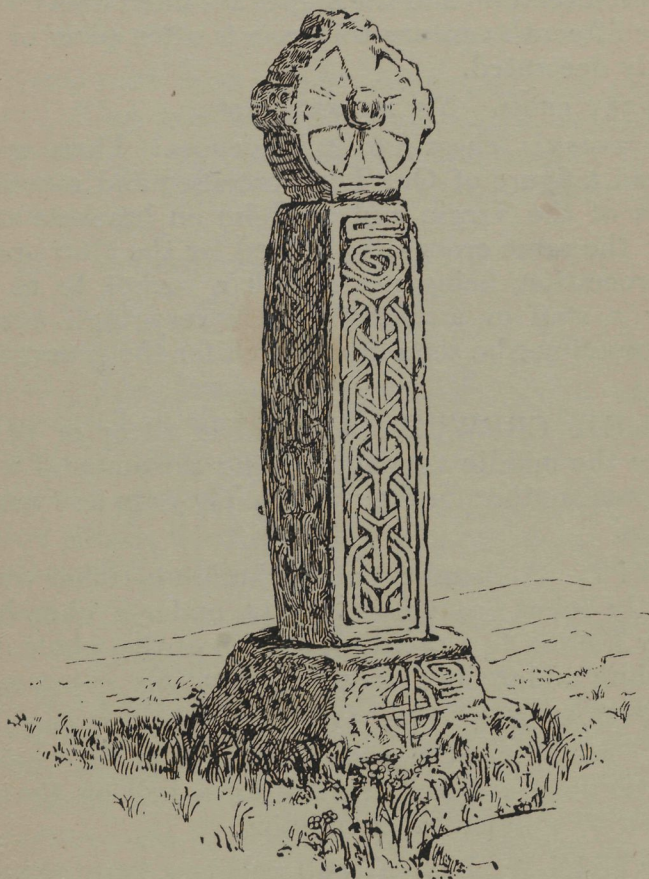


FIG. 85. CROSS NEAR PENMON

COFFIN-LID CROSS. *See* MONUMENT.

CONSECRATION CROSS. *See* CONSECRATION CROSS.

CROSS-PLAN IN CHURCHES. *See* CHURCH.

GABLE CROSS. The gables of churches were almost always surmounted by a cross of a decorative character and without the figure of Our Lord. Those of the thirteenth century are usually either placed in a circle or are richly floriated, often so much so as to assume a circular form. In the fourteenth century they become more architectural and the angles are filled with tracery. In the fifteenth century the cross is often plain or only slightly decorated.

MARKET CROSS. *See* MARKET CROSS.

PROCESSIONAL CROSS AND ALTAR CROSS. These generally had a figure of Our Lord crucified and sometimes figures of the Virgin and St. John on brackets at the sides; the same cross often served for the altar and for the procession, being made with a socket to fit into either a staff or a foot (M.). A very high aumbry may sometimes be seen in a church for the processional cross.

CRUET, CREWET. A vessel of silver or pewter used in the middle ages for holding sacramental wine; there was another for the water. They are now usually of glass.

CRYPT. A chamber under a building, either wholly or partly below ground. A crypt under a church* is usually limited to a small proportion of the whole area, extending under the presbytery only. (*See* CONFESSIO.)

CUPOLA (Ital. from Low Lat. *cupa*, a cup). A dome*; sometimes the word is applied to the whole of the little dome-covered erection for a bell on the roof or tower of a Renaissance building.

CURTAIN-WALL. A wall between two towers in a castle or fort. * *See* article thereon.

CUSP (Lat. *cuspis*, a point). A pointed member projecting from a Gothic arch towards its centre, formed by two arcs springing from the curve of the arch (fig. 86), or by the arcs of the arch itself (fig. 87).

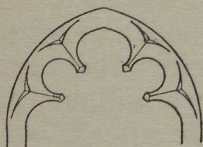


FIG. 86. CUSP

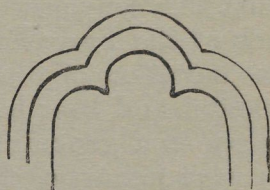


FIG. 87. TREFOIL ARCH

Both forms were used at all periods from the twelfth century. They are, for structural reasons, confined to small arches. Doors are more often cusped in the twelfth and thirteenth centuries than in later times. (See TRACERY.)

CYMA. See MOULDING (fig. 179).

CYMATIUM. See MOULDING.

DADO. The plain part of the pedestal of a column, between the base and cornice, usually forming about two cubes. (See ORDER, CLASSICAL.)

DAIS. A platform, raised one step above the floor, on which stands the high table in a medieval dining-hall; also called a FOOT-PACE.*

DANCETTE. A Norman enrichment generally called the zigzag.*

DECORATED PERIOD. The name given by Rickman to a phase of English architecture without definite limits but considered by him to begin about 1280 and to end about 1377. (See also Appendix.) Its chief characteristics are as follows: window tracery consists at first of simple geometrical forms such as circles and

* See article thereon.

quatrefoils, and afterwards of irregular shapes and flowing lines; the ogee arch is used (except in the earliest part of the period) in narrow openings such as niches and in the heads of window lights; the foliage has at first the conventional sprays with three or five lobes each of the Early English period, and afterwards is a close imitation of distinct species; the mouldings of the capital and base have no deep hollows, those of the arch are on a general splayed face (*see* MOULDINGS), the rolls have numerous fillets, and the wave-moulding is used in the latter half of the period; the only enrichments are the ball-flower and in the latter part of the period the battlement; in vaulting the number of ribs is increased, and in the fourteenth century lierne ribs are used; roof principals are of arched form.

DECASTYLE. *See* TEMPLE.

DEDICATION CROSS. *See* CONSECRATION CROSS.

DENTIL. A Classic and Renaissance enrichment, consisting of a small plain rectangular block, used mostly in the bed-mould of the cornice (fig. 88).

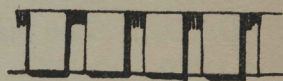


FIG. 88

DENTIL ENRICHMENT

DEVONSHIRE FOLIAGE. A debased form of foliage used in Devonshire late in the fifteenth century.

DIAPER. A pattern carved or painted on a wall in a medieval building, consisting generally of squares, but occasionally of some other simple figures, each of which contains a flower or a spray of leaves, or similar device (fig. 89).

DIASTYLE. *See* TEMPLE.

DIPTERAL. *See* TEMPLE.

DIAGONAL-RIB. In Gothic vaulting* the rib which crosses the bay diagonally (fig. 259).

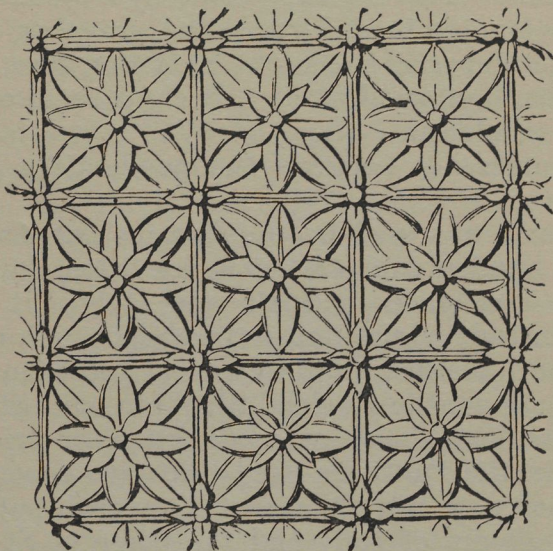


FIG. 89. DIAPER, WESTMINSTER ABBEY
Thirteenth century

DOG-TOOTH. The only enrichment used in the thirteenth century ; it consists of a pyramid, the sides of which are split upwards from the base nearly to the point and slightly opened out ; it is used in the hollows of arch-mouldings (fig. 90).

DOME. A roof or ceiling of a building, of hemispherical form or approximating thereto. It is built in horizontal courses each of which makes a complete circle. Each course is therefore self-supporting as soon as it is finished, and thus no ribs are required. As a dome is

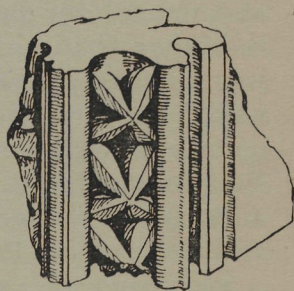


FIG. 90
DOG-TOOTH ENRICHMENT

* See article thereon.

usually placed on a square space some special arrangement is necessary to effect the transition from the square to the circle. This is usually done by a system of corbelling beginning in each angle and spreading out as it rises till each corbel meets the next one, thus forming a complete horizontal circle. Each of these corbels is called a pendentive* (fig. 198, p.). A vertical drum usually intervenes between the pendentives and the dome.

The dome was used by the Romans but not by the medieval builders except when under Oriental influence, hence it is confined to Spain and Italy. It became popular in Italy at the Renaissance (sixteenth century) probably on account of the Classical precedent, but it was scarcely used in England till Wren built St. Paul's. All the earliest domes were doubtless of brick; the Romans in the Pantheon used brick and concrete, but the method of construction is still under dispute. The medieval domes of Italy and the dome of St. Peter's consist of inner and outer shells, concentric and with but a comparatively narrow cavity between. At St. Mark's in Venice there are inner domes of brick, each with an outer shell of timber covered with lead, added at a much later date; the springing of the outer dome is higher than the crown of the inner. This system was adopted by Wren at St. Paul's and has since been used by others. The lantern of Wren's dome is carried on a brick cone between the inner and outer dome. In Renaissance vaulting each bay is generally covered with a flat saucer-shaped dome on pendentives, e.g. the nave and aisles of St. Paul's Cathedral.

DOMESTIC ARCHITECTURE. *See* HOUSES.

DOMUS CONVERSORUM. The house of the *conversi*, the building in a Cistercian monastery in which lived the *fratres conversi*, the lay brothers, men who

* See article thereon.

could not read and who did most of the manual work of the establishment.

DONJON. A stronghold or small castle consisting of a round tower. (*See* CASTLE, p. 35.)

DOOR, DOORWAY. Saxon doorways are generally covered by a plain round arch of a single order,* but occasionally they have a triangular head formed by two stones leaning against one another. Norman doorways are often very elaborately ornamented; they are usually roundheaded, but sometimes there is a lintel and carved tympanum under the arch; the arch consists of many orders, most of which are carried on detached nook-shafts* in the jamb; the tympanum is occasionally carried on a flat segmental arch instead of a lintel. The early Gothic doorways are not so rich, and of course the details are different, but they are similar in general arrangement; the lintel, though less common, is used and is occasionally supported in the centre by a column if the doorway is large: these double doorways have more often, instead of a lintel, sub-arches with tracery above; small doorways have often a plain lintel supported on corbels and no arch. The woodwork of Norman and thirteenth-century doors is usually simple, but the hinges are elaborately treated and are worked into large scrolls which sometimes cover the whole door. (*See* IRONWORK.) In the fourteenth century doorways are usually simpler and with fewer orders; shafts are gradually abandoned, the arch mouldings being carried down the jamb. The principal change of the fifteenth century, apart from the details such as mouldings which of course were in accordance with those employed elsewhere, is that the arch is placed in a rectangular frame formed by a repetition of the hood-mould carried up vertically from the springing and horizontally level with the apex (fig. 91); the spandrels thus enclosed are filled with sculpture, tracery or

* See article thereon.

heraldry ; sometimes the outer mouldings of the jamb follow the rectangular form of the hood-mould. The four-centred arch is of course common ; generally some of the mouldings are carried down the jamb, while others spring from one or more very small shafts ; the hood-mould is sometimes carried up in an ogee form and is ornamented with crockets and a finial. The woodwork of the door itself becomes elaborate, the head being often filled with tracery and tabernacle work ; the ironwork is correspondingly simple.

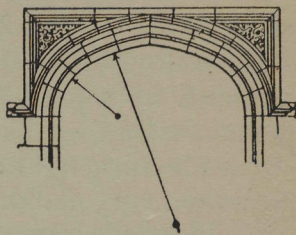


FIG. 91. DOORWAY WITH
DOUBLE HOOD-MOULD
Fifteenth century

During the long transition from Gothic to Renaissance doorways are in one style or the other or are a mixture of the two, having debased Gothic mouldings on the jambs and on the arch or lintel, within a framework of pilasters and entablature of crude classical detail. The simple Renaissance doorway has a round arch with an architrave*-moulding springing from an impost, the jamb being plain or panelled ; or it has a lintel and the architrave mouldings are carried round ; in rusticated work there is a flat arch.* In the more elaborate buildings the same arrangement is preserved but it is surrounded by pilasters or half columns supporting an entablature, with or without a pediment ; sometimes the pediment is 'broken,' that is the centre is omitted (fig. 197) and the space is filled by a shield of arms or a bust. Eighteenth-century doorways often have a fanlight* (fig. 98).

The door itself is panelled in two, four, or six panels ; the hinges in the sixteenth and seventeenth centuries have commonly two ornamental plates of similar design, one being fixed to the door and the other to the frame ; these were given up in the eighteenth century ; the

* See article thereon.

handles were brass pendant rings and continued in use till the nineteenth century.

DORIC ORDER. *See* ORDER, CLASSICAL.

DORMER WINDOW. (*Dormer*, a sleeping-room). A window projecting from the slope of a roof.

DORMITORY. A sleeping-room common to several persons. (*See* also MONASTERY.)

DORTER. A monkish abbreviation of the word dormitory.

DOSSAL, DOSSEL. (Lat. *dorsum*, the back). A curtain hung behind an altar or behind the seats in a hall.

DOVEHOUSE. *See* PIGEON-HOUSE.

DRAWBRIDGE. *See* CASTLE.

DRAWING-ROOM. A contraction of 'withdrawing-room,' a room to retire to from the dining-hall.

DRESSINGS. All those brick or stone parts of a building which may be distinguished from plain walling, such as columns, jambs, arches, entablatures, string courses, copings, quoins, etc.

DRIPSTONE. *See* HOOD-MOULD.

DROP-ARCH. *See* ARCH.

DROPS. *See* ORDERS, DORIC.

DUNGEON. A lower chamber in a castle,* partly or wholly underground.

EARLY ENGLISH PERIOD. The name given by Rickman to a phase of English architecture without definite limits, but considered by him to begin about 1189 and to end about 1280 (*see* Appendix). Its chief characteristics are as follows: The work is much more refined than formerly, and the masonry has much thinner joints; the arches are pointed, or in the case of some small arches, trefoiled; windows are long, narrow

* *See* article thereon.

lancets, single or in groups; two are sometimes embraced under one arch, and the tympanum is pierced, producing plate-tracery (*see* TRACERY); the projection of the buttress is greater than in the twelfth century, and the width is less, the two being about equal; flying buttresses are used; columns are slight, and are round, octagonal or multifoil, and a large round column is often surrounded by a number of small shafts; the foliage of the capital consists of broad flat leaves ranged vertically round the bell and curling over at the top with a boldly projecting knob, or breaking into five-lobed tufts; the foliage of crockets and of spandrels, etc., is of the same character; most capitals are not carved, but have rings of simple mouldings round the upper part of the bell; the abacus is deeply undercut; the base is widely spreading and has two rolls separated by a deep hollow; the arch consists of a series of recessed orders which are moulded on their edges; the only enrichment is the dog-tooth; in vaulting the ribs are at first few, but they rapidly increase in number; the spandrels next to the walls have a ploughshare form; roofs are of a trussed-rafter form, or there is a rudimentary truss consisting of a tie-beam with a post standing on it.

EASTER SEPULCHRE. A place provided in mediæval churches for a representation of the burial and resurrection of Our Lord. Its position was in the chancel on the north side. Generally it was of wood and removable, but sometimes it was a permanent stone recess in the wall and was of elaborate architectural character. Sometimes an altar-tomb was used, and doubtless people often desired that their tomb should be on the north side of the chancel in order that it might be so used. The service of the easter sepulchre at Durham was briefly as follows:

Uppon good friday theire was maruelous solemne seruice, in the wch after the passion was sung, two of the eldest monkes

did take a goodly large crucifix bringinge that betwixt them to the lowest steppes in the quire, and then one of the sd monkes did rise and went a prettye way from it with his shooes put of, and uerye reuerently did creepe uppon his knees unto the sd crosse and most reuerently did kisse it, and all the other monkes after him, in the meantime all the whole quire singinge an himne, the service beinge ended, the two monkes did carrye it to the sepulchre wch was sett upp in the morninge on the north side of the quire nigh to the high altar, and there did lay it, with another picture [*i.e.* statue] of our sauour Christ, in whose breast they did enclose the blessed sacrament of the altar, senceinge and prayinge into it upon theire knees.

There was uerye solemne seruice uppon easter day between 3 and 4 of the clocke in the morninge, where 2 of the oldest monkes came to the sepulchre and did sence it sittinge on theire knees, then they both risinge came to the sepulchre, out of which they tooke a maruelous beautifull Image of our saviour representinge the resurrection, in the breast whereof was enclosed in bright Christall the holy sacrament, throughe the wch christall the blessed host was conspicuous to the behoulders, then after the elevation of the sd picture, singinge the anthem of christus resurgens, they brought it to the high altar, the which anthem beinge ended the 2 monkes tooke up the picture from the altar, proceeding in procession to the south quire dore, where there were 4 antient gentlemen belonginge to the prior holdinge upp a most rich cannopie of purple ueluet, to beare it over the Image carried by two monkes round about the church, the whole quire waitinge uppon it with goodly torches and great store of other lights, all singinge, reioyceinge, and praising god, till they came to the high altar againe, whereon they did place the Image, there to remaine untill the assencion day (v).

EAVES. The lower edge of a roof. If they overhang the wall they are finished with a cornice or a cove (fig. 92), or with a level boarded or plaster soffit, or are left plain so that the feet of the rafters or splockets are seen from below.

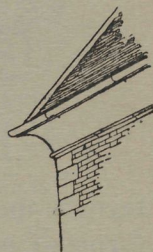


FIG. 92
EAVES WITH
PLASTER COVE

ECHINUS. *See* MOULDING.

EGG AND DART OR EGG AND TONGUE. An enrichment used on the echinus moulding*; it consists of eggs placed on end alternating with arrows with their points downwards (figs. 93, 94).



FIG. 93. EGG AND DART
ENRICHMENT

ELEMOSINARIA. An almonry.*

ELIZABETHAN PERIOD. *See* RENAISSANCE ARCHITECTURE.

EMBATTLED. Having battlements.*

EMBLEM. *See* SYMBOL.

EMBRASURE. *See* BATTLEMENT.

ENGAGED COLUMNS. Columns attached to a wall from which they stand out from one-half to three-quarters of their diameter.

ENGLISH BOND. *See* BOND.

ENRICHMENT. An ornament carved or painted on a moulding and repeated either at long or short intervals or without interruption. It is distinguished from a running ornament, such as a scroll of foliage, in being a repetition of a form which is complete in itself; the

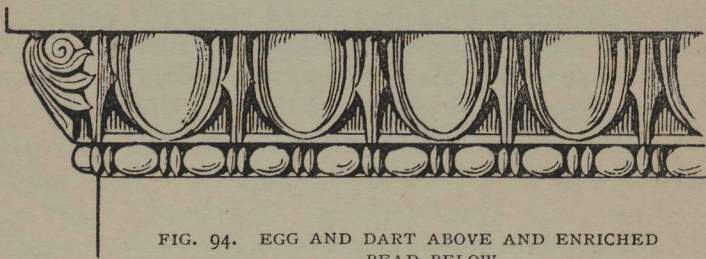


FIG. 94. EGG AND DART ABOVE AND ENRICHED
BEAD BELOW

term is moreover generally confined to well-recognized forms of a conventional character.

In Classical work the enrichments are always carved in low relief on convex mouldings or on those with

* *See* article thereon.

compound curves, and the principal outline of the enrichment is similar to the section of the moulding. Thus the egg enrichment (fig. 94) is carved on the convex ovolo (fig. 180), the honeysuckle (fig. 96) on the compound curve of the cyma (fig. 179). The numerous enrichments of our Norman* are no doubt an inheritance from the Romans; they were abandoned during the twelfth century, and in the three following centuries two different enrichments were never used in the same piece of work and were scarcely in vogue at the same time. (See EARLY ENGLISH, DECORATED, ORDER, PERPENDICULAR.)



FIG. 95. GUILLOCHE



FIG. 96. HONEYSUCKLE

Elizabethan enrichments are numerous, and are mostly a corrupt following of the Roman; in Stuart times they of course became more correct.



FIG. 97. LEAF AND SPEAR

ENTABLATURE. In classical architecture the horizontal superstructure on the columns. It consists

* See article thereon.

of three principal parts: the architrave, the lowest or weight-carrying member; the frieze; and the cornice, formed by the projection of the roof. (*See* ORDERS.)

ENTASIS. The slight swelling towards the centre of a classical column; its object is to correct the illusion that the column is smaller in the middle, an effect which is sometimes produced in a bright climate. The column diminished towards the top, so that the entasis did not make the shaft actually larger in the centre than at the bottom, but merely made the diminution in the lower half less than in the upper half.

ENTRESOL (FR.) OR MEZZANINE (ITAL.). In French and Italian houses of the Renaissance, a low storey over the ground storey, the two together being included in one order and being equal in height to the entrance archway to the court.

ESCUTCHEON. (1) A shield charged with armorial bearings. (2) A metal plate round a keyhole (fig. 126).

EUSTYLE. *See* TEMPLE.

EXTRADOS. *See* ARCH.

FACIA, FASCIA. A flat band or face in an entablature.

FALDSTOOL. The true meaning is 'folding-stool,' a portable seat which would fold up. When the bishop officiated in any but his own cathedral church a faldstool was placed for him in the choir (P.); possibly this was derived from the portable seat of the Roman magistrate. The term is now curiously applied to the Litany* desk.

FANLIGHT. A window in the tympanum over a square-headed door and under an arch, common in

* See article thereon.

town houses of the eighteenth and nineteenth centuries. The divisions between the panes radiated, pro-

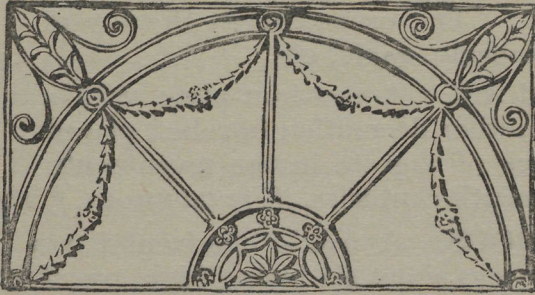


FIG. 98. FANLIGHT

ducing a fan-like form (fig. 98, in which the fan form is retained, although the window has a straight top).

FAN-TRACERY VAULT. *See* VAULT.

FEATHERING. The same as cusping.*

FERETORY. A wooden structure placed on the top of a tomb. Example: the shrine of Edward the Confessor at Westminster Abbey. (*See* MONUMENT.)

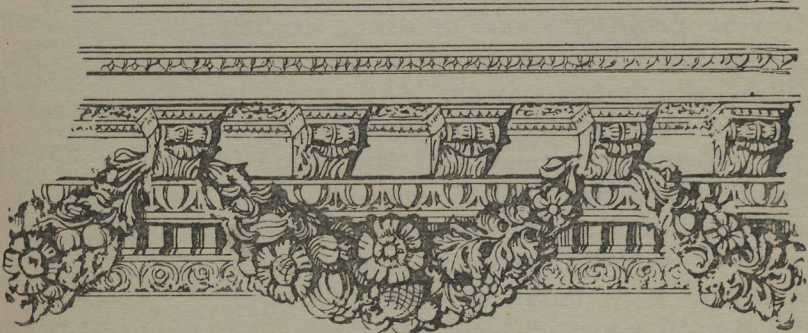


FIG. 99. INTERNAL CORNICE WITH FESTOONS

FESTOON. Used as a decoration in the frieze in Roman and Renaissance architecture (fig. 99).

* See article thereon.

FILLET. A narrow flat band on a moulding (fig. 100) or shaft, or between flutes* of a shaft, or elsewhere.

FINIAL. The ornament on the top of a spire, pinnacle, gable, etc.

FIRE-BACK. A cast-iron plate, with a picture or other decoration in relief, placed at the back of a grate in the seventeenth and eighteenth centuries. (*See IRONWORK.*)

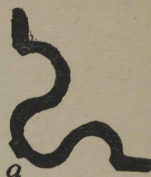


FIG. 100. BOWTEL
MOULDING
WITH FILLET AT *a*

FIRE-DOGS. A pair of horizontal iron bars supported on legs about six inches high, on which to rest the ends of logs placed on a fire; the ends were turned up and rose vertically to a height of a foot or two, to keep the logs from falling off, and were terminated in animals' heads.

FIRE-PLACE. *See CHIMNEY.*

FLAMBOYANT. *See TRACERY.*

FLEMISH BOND. *See BOND.*

FLINT-AND-STONE WORK. A system of external decoration of buildings in use in East Anglia in the middle ages (fig. 101); by this means tracery or inscriptions or other devices are produced in stone on a ground of flints, which have been split so as to show a black surface; in the more complex forms the surface of the stone is sunk about two inches, and the flints are let into it. In some late fifteenth-century work the stone is sunk about a quarter of an inch, and the sinking is filled with a sort of black mortar.



FIG. 101. FLINT-AND-
STONE WORK
SWANINGTON CHURCH

FLAGON. A tall vessel with a handle and lid for holding liquor. It was first used in the service of the Sacrament after the Reformation to take the place of

* See article thereon.

the cruets which had held the water and wine; this probably explains why it was usual to have a pair when one would have been enough; they are usually cylindrical or slightly tapering.

FLÉCHE (FR.). A small wooden spire usually covered with lead, placed on the roof at the crossing of the nave and transepts in French churches.

FLOOR. See PARQUETRY, PAVEMENT, TILE.

FLUTES. Grooves in a column; generally vertical as in the Classical columns (*see ORDERS*), but sometimes spiral as in Norman work. The Doric (fig. 102 *a*) has twenty flutes with sharp edges between; the other orders have twenty-four flutes separated by fillets (fig. 102 *b*).

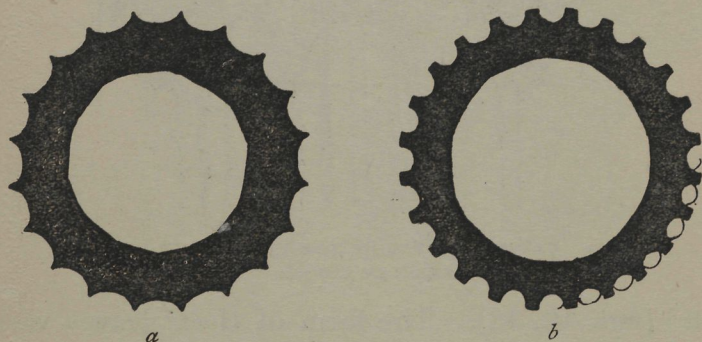


FIG. 102. *a* DORIC COLUMN. *b* IONIC AND CORINTHIAN, WITH
CABLED FLUTES IN ONE QUARTER

CABLED FLUTES. The flutes of Roman and Renaissance columns are sometimes filled for one-third of their height with a plain convex member, and are then said to be cabled; the cables never have a spiral form like a rope (fig. 102 *b*, cables are shown in one quarter of the column).

FOLIAGE. The earliest sculptured foliage of which it is necessary to take account here are the interlacing scrolls used both before and immediately after the Con-

quest on crosses, on door jambs and arches, and on capitals. These involved patterns form a kind of rude arabesque,* but they are probably northern in origin.

Soon after the Norman Conquest the most important position in which foliage is used is in the sculpture of the capital.* The block of convex form covered with twining sprays is soon given up for the more animate and beautiful capital of concave outline ornamented with leaves growing upright from the necking and bending over beneath the projecting angles of the



FIG. 103. CARVED CAPITAL OF THE THIRTEENTH CENTURY
BERKLEY CHURCH

capital (figs. 42, 43). The form of these leaves varies a good deal in different examples, but it is clear that either directly or indirectly they are derived from the classical acanthus* (fig. 5). Like it the leaves are serrated, are ranged symmetrically round the bell of the capital and curl over at the top or are gathered up at the angles of the capital (the upper part of which was square) into volute-like knobs. The best examples of this Romanesque acanthus foliage are to be seen in France and in English buildings where French influence was felt, like the choir of Canterbury.

But most examples show a departure from the acan-

* See article thereon.

thus. The serrations are omitted or suppressed and the broad leaves end in boldly projecting knobs ranged in two rows round the bell. These knobs of three-lobed or five-lobed foliage gradually expand in the first half of the thirteenth century and form very exquisite sprays, thrown about with careless grace in strong contrast with the stiff crockets from which they grew (fig. 103). Another line of development can be traced

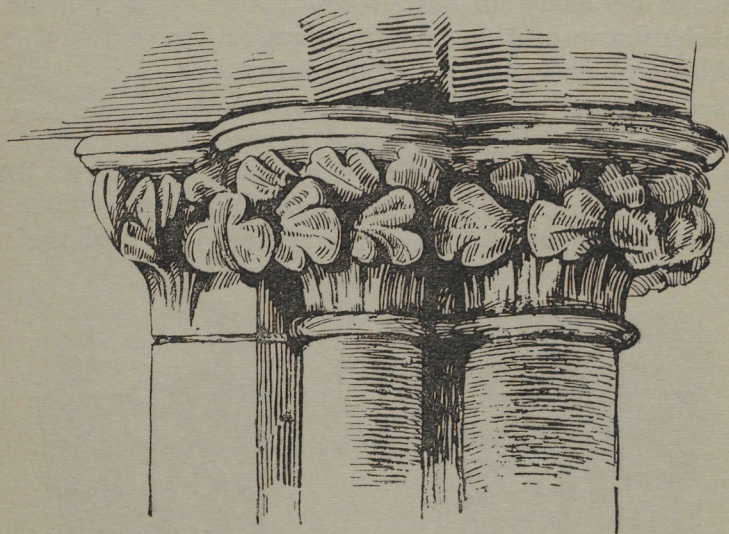


FIG. 104. FOLIAGE OF THE THIRTEENTH CENTURY
RAUNDS CHURCH

from the little detached sprigs which are set rather formally round the bell (fig. 42). This foliage reached perfection about 1250, when it still retained the somewhat formal arrangement appropriate to its position; but later it became more free, perhaps a little too free, and grew rather confused.

Foliage is used in the hollows of mouldings, both as detached sprays and as a running arabesque; scrolls are also used in the spandrels of arches; the crockets* on gables (fig. 82) are similarly treated. In all these

* See article thereon.

cases the general character of the foliage is the same; the lobes are, unlike those of the acanthus, rounded at the ends; the outer lobes are curled up tightly, and the central lobe has a strong rib lying in a deep hollow, which stops abruptly near the end of the lobe (fig. 105).



FIG. 105. FOLIAGE OF THE THIRTEENTH CENTURY

In the latter part of the thirteenth century or early in the fourteenth the character of the foliage changes rapidly and entirely; an exact imitation of particular species is now aimed at and achieved (fig. 106); but there is a great loss in strength, in abstract beauty of line and modelling, and in architectural fitness. This is especially the case in capitals where the foliage is

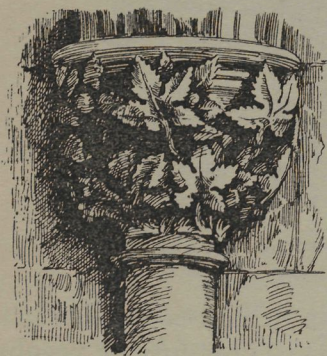


FIG. 106. NATURAL FOLIAGE
FOURTEENTH CENTURY
SOUTHWELL MINSTER



FIG. 107
CARVED CAPITAL
FIFTEENTH CENTURY

arranged as a heavy wreath round the bell rather than as living shoots. The diaper,* instead of having a complete little pattern in each square, is often treated as a trellis with a rose tree or what-not rambling through

* See article thereon.

it. The plants most commonly copied were the oak, rose, maple and vine.

This adoption of a particular species as a motive was by no means a mere direct and literal copying of a single plant. Much skill was shown in the disposition of the masses to produce effective light and shade, and in the hands of a master, or when the art of the nation was at its height, very beautiful results were obtained. But these natural forms are not so suitable for reproduction in stone and wood, nor are they so appropriate to their architectural surroundings or to their decorative functions as the carving of the thirteenth century. Nor did this treatment lend itself to adoption as a national and traditional style to be used by all men of very various degrees of skill. In the latter part of the fourteenth century it settled down to a mere convention of a somewhat cabbage-like form of no decorative value (fig. 107).

This mannerism continued throughout the fifteenth century, gradually becoming more formal and lifeless. The fully carved capital was now seldom used. Isolated leaves are placed round the bell and in the hollows of string courses, or they are ranged, not without skill and sometimes with good modelling, to form a cresting called brattishing* on the top of a cornice. Spandrels are commonly filled with a spray, which also is sometimes well carved. (See TUDOR-FLOWER.)

The influence of the Renaissance is first seen in the delicate arabesques both in stone and wood which are found early in the sixteenth century introduced into otherwise pure Gothic. When the classical orders were used the acanthus followed the Roman variety or an Italian version of the Roman. The rich Elizabethan ceilings were decorated with scrolls of vine, but after the introduction of pure Palladian architecture by Inigo Jones these were abandoned. Two or three

* See article thereon.

varieties of foliage were then used: the acanthus on Corinthian capitals, under consoles and in such-like places; arabesques, with leaves of somewhat the same character as the acanthus in pilasters, in spandrels and so forth; festoons* (fig. 99) of quite natural fruit, flowers and leaves in friezes or hanging down the walls tied with ribbons—a style so familiar in the work of Grinling Gibbons and his school; and palm-branches used in spandrels round coats-of-arms and trophies. All these continued in use throughout the seventeenth and eighteenth centuries.

The fancy of the carver, however, occasionally broke away from these formalities; a good traditional arrangement of common field flowers mingle with the cherub heads on the grave-stones of the country churchyard, and appears even on one of the severest productions of the eighteenth century (fig. 108).



FIG. 108. FREE CARVING OF THE EIGHTEENTH CENTURY

FOLIATION. The trefoil, cinque-foil, or other leaf-form given to an arch* or to piercings in tracery either by breaks in the main curves or by subordinate cusps branching out from them.

FONT. The old fonts were large enough for the total immersion of the infant. They occupied a conspicuous and open place towards the west end of the church, any sort of baptistery in the form of a separate building or a part of the church divided from the rest being unknown in England. In 1236 it was ordered that the font should be kept covered and locked (p.), for it was the practice to change the consecrated water only occasionally (m.). The cover often became a very

* See article thereon.

elaborate and lofty wooden erection, and was in some instances fixed and had an opening at the side; this form was, perhaps, an introduction from Italy by Laud. The usual material for the font was stone, though there are some thirty examples of lead, mostly found in those parts of the country where the metal was easily procured; some early fonts are of black marble or of Purbeck marble; for the post-Restoration fonts white marble is commonly used.

The Norman fonts were generally either square or round on a plain massive pedestal and were decorated with small arcades or with sculpture. In the thirteenth century groups of shafts, so characteristic of the period, were used in the pedestal, and the bowl is octagonal. In the later middle ages the bowl was of the same shape and the pedestal was also a plain octagon. In the fifteenth century the bowl is often decorated with tracery, heraldry or sculpture and the cover assumes the form of a spire. After the Restoration the bowl is commonly very small and stands on a baluster-shaped pedestal.

FOOT-PACE. A dais*; the term is now usually applied only to the dais for an altar.

FRATER (from Old Fr. *fratur*, short form of *refreitor* from Low Lat. *refectorium*, a dining-hall—H). The monks' dining-hall in a monastery.*

FREEMASON. In the middle ages this term meant one who worked freestone* as distinguished from a rough mason. Of the gilds of freemasons little is known and perhaps there is little to know. Their rules must have differed somewhat from those of other trade gilds because they had to move about from place to place; that they did not usually travel far seems to be proved by the very distinct peculiarities of style in different districts.

* See article thereon.

FREESTONE. Any stone which can be easily dressed with the chisel, as distinguished from those which cannot be shaped or can only be roughly squared with the hammer.

FRESCO PAINTING (Ital. *fresco*, fresh, cool). Painting* done on fresh plaster while it is still wet; only so much of the wall or ceiling was plastered with the finishing coat as could be painted the same day. The colour sank into the plaster so that the process is more permanent than others, but it was practically impossible to make alterations. This method of painting was practised by the ancients and in medieval Italy, but not in England, where tempera* painting only was used.

FRET. An enrichment cut on a flat surface; sometimes called the key-pattern (fig. 109); there are several varieties. In the middle ages the term was used in many senses, e.g. cusped, embossed, set with jewels.

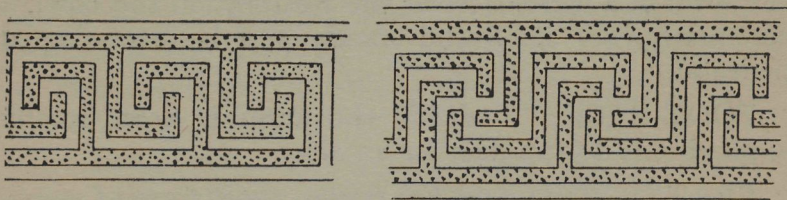


FIG. 109. FRETS

FRIEZE. The middle division of the entablature. (See ORDER, CLASSICAL.)

FRITHSTOOL. "Literally the seat of peace. A seat or chair placed near the altar in some churches, the last and most sacred refuge for those who claimed the privilege of sanctuary within them, and for the violation of which the severest punishment was decreed; they were frequently if not always of stone" (P.). Examples, Hexham Abbey and Beverley Minster (P.).

* See article thereon.

FRONTAL. *See* ALTAR, FRONTAL.

FRONTISPIECE. The front of a building, more often the decorated entrance (G.).

GABLE. The end of a roof of triangular or other form; the term is generally applied only to steep pitched Gothic roofs, the low classical gable being called a pediment.* There are two principal methods of construction: (1) the outer part of the wall is carried up above the roof and is finished with a coping; (2) the roof is carried over the wall and projects more or less beyond: this method is the more appropriate for timber buildings. The gable was almost invariably triangular in the middle ages; in the sixteenth century and early part of the seventeenth

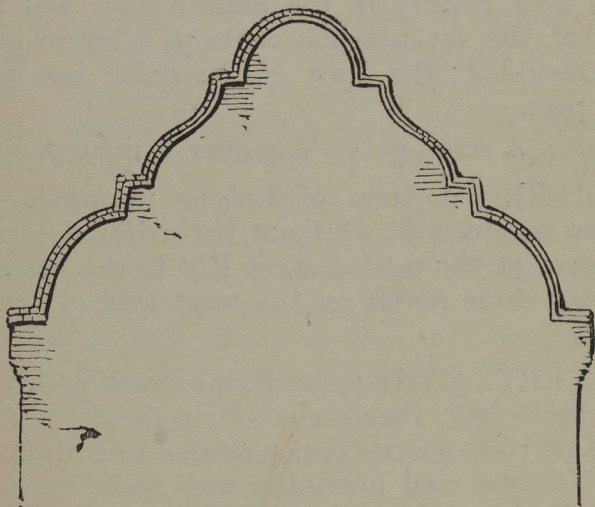


FIG. 110. CURVED GABLE

its outline was a succession of small curves (figs. 110, 111) or was stepped (*see* CORBIE STONES, fig. 81), the coping being either stone or brick; in the latter part

* *See* article thereon.

of the seventeenth century large ogee curves are more common. When the roof projected beyond the wall, the edge or 'verge' was finished with an ornamental

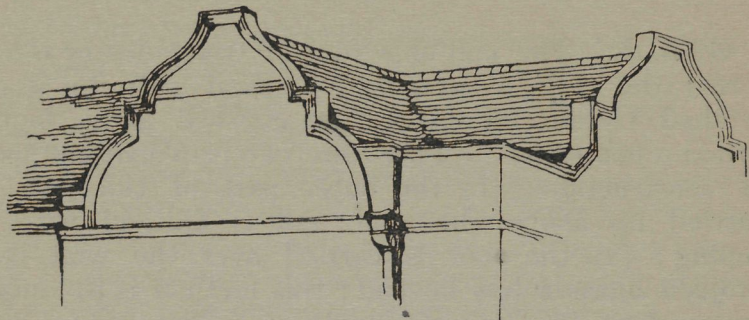


FIG. III. CURVED GABLES. FEN DITTON

board called a barge-board,* which was carved or pierced with tracery in the middle ages and till the middle of the seventeenth century, after which time it was moulded; the apex of the gable has an ornamental post.

GABLET. A small gable, e.g. over a niche or buttress.

GALILEE. A term of various meanings and of unknown origin. At Durham Cathedral it is applied to a chapel at the west end, at Ely to the west porch, at Lincoln to a porch on the west side of the south transept.

GALLERY. (1) An upper floor extending over a part of a church, hall, theatre, or other room; (2) a wide passage or room on an upper floor connecting distant parts of a house and providing wall space for pictures; hence (3) a whole building intended for the exhibition of pictures.

(1) In a medieval church there was a gallery over the rood-screen (*see* **ROOD-LOFT** and **PULPITUM**); the private chapel of a large house* had a gallery at the

* See article thereon.

west end for the family; and a medieval hall had a gallery over the screens passage. Early in the seventeenth century galleries were erected at the west end and in the aisles of churches,* and Laud was charged with their removal and with preventing their erection; the west gallery contained the choir and band, and was common in churches till the middle of the nineteenth century; a small gallery for the band was also common in the assembly rooms of the eighteenth and nineteenth centuries. A rather curious variation of this meaning of the term is its application to the gradually rising platform in a school for infants.

(2) The gallery, which forms an important feature in a large Elizabethan house,* is derived from the covered passages which connected the various half-detached portions of a medieval house, and its development is in great part due to the fashion of having portrait paintings. It sometimes joined buildings which were otherwise separated; other examples are built against the side of another building, e.g. a hall which rises to the whole height of a house.

GARGOYLE (usually pron. gurgoyle). A projecting spout which drains the gutter behind a parapet and shoots the water clear of the walls. It is sometimes a lead trough, but more usually it is of stone and is carved into a grotesque creature. It was gradually superseded by rain-water-heads* and pipes.

GARRETT (from Old Fr. *garite*, a place of refuge, a look-out). A chamber constructed in the roof, an attic.*

GEOMETRICAL TRACERY. *See* TRACERY.

GEORGIAN PERIOD. *See* RENAISSANCE ARCHITECTURE.

GESO. A hard fine plaster. (*See* PAINTING.)

* See article thereon.

GLASS. The knowledge and use of glass is very ancient, but its application to windows seems to be

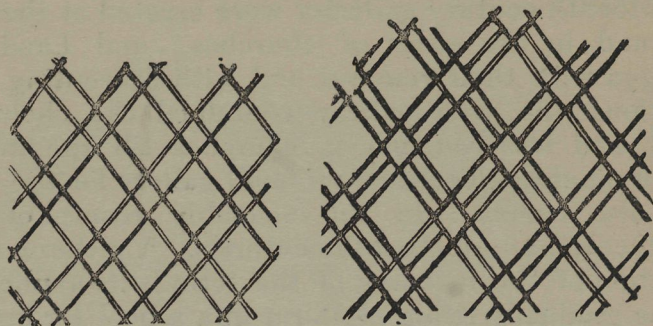


FIG. 112. LEAD LATTICE GLAZING
Probably seventeenth century

comparatively recent. It appears to have been used in this way by the Romans to only a very limited extent. It was known to the Saxons, but did not become common till the thirteenth and fourteenth centuries. Coloured glass has been used almost as long as white glass. Decorative effects have also been produced at different periods by using white glass in leaded patterns.

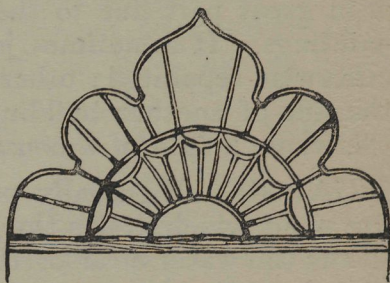


FIG. 113. LEAD GLAZING
Probably eighteenth century

GOTHIC ARCHITECTURE. The style of architecture in use from the latter part of the twelfth century till near the middle of the sixteenth.

“A certain Fantastical and Licentious manner of Building, which we have since call’d *Modern* (or *Gothic* rather) Congestions of Heavy, Dark, Melancholy and *Monkish Piles*, without any just Proportion, Use or Beauty, compared with the truly Antient” (John Evelyn, 1696-7).

In France the style ran a course fairly parallel with English Gothic, and it is there that it reaches its

highest perfection. Its decline is characterised by fantastic elaboration, while ours became on the whole more severe. In Germany Romanesque continued longer and was developed to a high degree of refinement before Gothic was introduced from France. Gothic architecture seems never to have become a natural manner to the Italians; they were late in adopting it and they gladly threw it over for the classical style in the fifteenth century.

In the seventeenth century, under the influence of Laud, some attempts were made to build in a Gothic style, "which," says Walpole, "we call King James' Gothic." This revival, however, was prompted entirely by religion and had no artistic spontaneity.

The Gothic revival of the nineteenth century was the inevitable reaction against the excessive formalism and the unnatural Italian imitations of the latter half of the eighteenth century. It formed a part only of a general movement which included other arts and literature.

To say that the revived Gothic style has so far failed to re-establish itself as a natural and general mode of artistic expression, and that there has even set in a reaction in favour of the Renaissance architecture, is not to say that the Gothic Revival has been without results or produced no effect. Such might, with as much truth, be said of the pre-Raphaelite movement or of the Romantic literature of the early nineteenth century. To appraise these phenomena and to say how far they were actually productive of results and how far merely symptoms of a general tendency cannot be attempted here.

That Gothic architecture should fail to take root seems to us almost a foregone conclusion. The conditions of the middle ages and of the present day are so entirely different; not only the conditions which buildings are required to fill, great as is the change

in this respect, but the conditions under which buildings are produced have changed even more—have been revolutionised. Medieval architecture was a purely traditional art, passed on from father to son and from master to apprentice, and slowly developed and as slowly let die by the slight improvements and slight lapses of successive generations. There were no written rules. In the middle ages consequently there were no architects—a most healthy state. It might almost as truly be said that there were no builders. The contractor and his contract appear towards the end of the period, but in earlier times the employer gave his directions, bought his materials and paid the workmen weekly wages till the work was finished or the money had come to an end. But at the beginning of the nineteenth century architectural tradition was almost dead—killed by a succession of importations from Italy, China, Greece; while there had been well-nigh a flood of books for a hundred years past giving rules and patterns for everything.

It is clear that such different conditions must produce very different results, and that an art which flourishes and grows rapidly at the one period is impossible at the other. But after all, and quite independently of this, the great overmastering and inexplicable fact is that at one time the country—and indeed Europe—was full of artistic and especially architectural energy and feeling, while at the other it was lifeless. But for this the revived art would have blossomed and perhaps borne fruit, contracts and importations and pattern books notwithstanding.

To state in a few words the qualities of medieval art is impossible. Its most obvious characteristics—speaking not of England only but of Europe generally—are perhaps the restless energy with which it was pushed on through many mutations in the comparatively short period of three centuries; the extraordinary daring of

the builders in construction, their carelessness or lack of sensitiveness as to the attainment of perfection, their exuberance and want of artistic reserve or restraint, the lively fancy which gives so much individuality to the work, and, most remarkable of all, the outcome of their merits and their frailties, that indescribable *humanity* in the very stones.

This extraordinary outburst of artistic production becomes more rather than less mysterious as we examine it. Its rapid development in the thirteenth century is remarkable, but its almost sudden and complete ending in the sixteenth is dramatic. For the end was complete. The art of the seventeenth century was of an altogether different order. Great architecture was produced, and the smaller buildings retained much of the character and much of the charm of medieval work, but the universality of medieval art and the *lavishness* of its beauty were past. Medieval art was not merely an affair of splendid masonry and carpentry, which are almost all that remain to us now. Along with these went magnificent schools of sculpture and painting of profoundly poetical conceptions and masterly technique, a school of glass painting which has never been approached, working in iron and casting in bronze and lead and engraving on brass, gold and silver work perfect alike in design and in execution, enamelling applied to the minutest vessels and to the broad surface of the shield, tapestry, embroidery and weaving, carvings in wood and in ivory, and illuminating on vellum. Nor was it only the arts that were artistic, but every common object of furniture and household use had form, colour and character. Dress, armour, heraldry and coins were treated with a sense of design with which the nations seem to have been infused. And all these crafts, and this faculty for giving to everything which it touches something of the char-

acter of a work of art, may be said to have reached their climax between the years 1300 and 1400.

So extraordinary is this manifestation, so far removed from anything that is possible to us, and so impressive are the works which it produced, that it is common to find them, or at least those of the greatest period, spoken of and even written about as if they were altogether above criticism. This position has only to be stated to show its falseness. Produced under a strong unwritten tradition the art perhaps maintained a more uniform level than at periods when individual architects impart to their work their weakness and their strength. But, nevertheless, there is much difference in quality between one building and another, between district and district, between nation and nation.

Medieval architecture itself and not a few of those other arts mentioned above were entirely the creations of the northern mind; others came by contact with the East or by inheritance from ancient times. Some have been surpassed at other periods and in other lands. But considering their number and variety, including as they do every branch of art from the greatest to the least, and remembering the height to which all were carried, it may be said that Gothic art taken as a whole will rank above that of any other people or time of which we have knowledge.

GRANGE (Lat. from *granum*, corn). (1) A barn; granary. (2) A farmhouse; an old country house somewhat larger than the ordinary farmhouse. (3) The house and barns on an outlying property of a monastery.

GRECO-ROMAN ARCHITECTURE. "The style of architecture adopted by many architects in England at the end of the last [eighteenth] century, in which the severity of the ancient Greek style is modified by the richness and elaborate details of that of the Roman,

together with the introduction of features such as the arch, adapted to the requirements of the style and of the present era" (G).

GREEK ARCHITECTURE. The term is commonly used in the limited sense of the three Greek Orders* — Doric, Ionic, and Corinthian—as perfectly developed, and the arrangement of temples* and their porticoes as represented by the perfected types of Athens. It is clear, however, that these buildings are the outcome of a long period of growth either on the mainland or in the islands, which has left practically no remains. For the earliest buildings of the classical age are to all intents and purposes perfect, and differ only in slight respects from the latest: in sturdiness of proportions and in lack of refinement. The Doric forms are, it is thought, derived from buildings of timber. But if the details suggest a timber origin, the general proportions are very far from doing so. A portico constructed of timber would have thin columns placed at wide intervals, for the weight they would have to support is immaterial, and they would be kept upright by being planted in the ground, while the transverse strength of timber allows the lintel to be long in proportion to its depth. But in the Doric stone portico the columns are massive and very close together, while the architrave is deep; and moreover the earlier buildings have the more massive proportions. This contrast between the actual stone buildings and what we suppose wood buildings to have been indicates a long interval of time, and the absence of intermediate links suggests the possibility of importation.

The Ionic and Corinthian Orders are used in buildings somewhat later in date than the Doric, but they appear fully developed; there are no archaic examples. The invention of the Ionic capital with its great spirals, has

* See article thereon.

been accounted for by many theories, and the invention of the Corinthian acanthus-capital by a pretty story. But architectural forms, like most other things, are not invented, they grow.

And so the foundations of Greek architecture must be sought for not in invention and perhaps not on the mainland, but in prehistoric cities, and probably in those of the Archipelago and of Crete; perhaps some of the stages which connect them, through what has hitherto been known as Mycenaean art, with the perfected Greek art may yet be revealed.

The genius of the Greek as an artist lay not in inventing the new but in perfecting the old. In this adherence to tradition he is an Oriental; as a master of form rather than of colour, he belongs to the West. His stern suppression of self and his rather cold pursuit of the ideal are his own peculiar contributions to art. In his severity he leaves the East. His aim at perfection involved loss of individuality; the Gothic nations in their assertion of individuality necessarily rejected the ideal.

This striving after perfection by the refining of an accepted model is illustrated in a remarkable way in the subtile 'optical corrections' of the best buildings. The diminution of the column and its entasis, the closer spacing of the columns at the angles of the portico, the inward lean of the columns, and the arching of the horizontal lines are all means to an end: the counteracting of optical illusions.

It is not surprising to find that a people who showed by these precautions what importance they attached to the most absolute repose should altogether reject the arch. The Greeks knew of and understood the arch, and there are one or two instances of its employment, but this fact only emphasises their refusal.

To most people who have seen the actual buildings, their white marble mellowed and stained with gold, it

will always remain a mystery that the Greeks should have entirely covered their buildings with plaster and should have painted that plaster. But they did not see them as we see them, mellowed by time; and no doubt the effect of large masses of white marble with its hard lustrous surface was painful to them. It must be remembered that the dislike of plaster is entirely English and modern, and we may take it that the Greek judgment was sound.

GRESE, GRECE, GRYSE. The medieval term for a step.

GROIN (lit. a fork or branch). The salient angle formed by the intersection of two vaulting surfaces.

GROINED VAULTING. Vaulting* consisting of intersecting surfaces forming salient angles with or without ribs, as distinguished from barrel vaults, domes and, to speak accurately, fan vaulting.

GROTESQUE (from Fr. *grotte*, a grotto, cave). A fantastic representation of a man or animal.

GUESTHOUSE. A building provided for the accommodation of guests in a monastery.*

GUILDHALL (*properly* GILDHALL), TOWN HALL, TOLBOOTH. It would seem that it was originally built as a booth, a mere roof on wooden posts, at which to collect market tolls. When a room was required as a place of meeting for the Gild Merchant or the Town Council, the easiest and most convenient way of providing one without encroaching on the market-place, the rents for which were of value to the town, was to build a chamber over the Tolbooth. And when, in later times, the Town Hall was rebuilt in stone or brick, the same arrangement was kept. Thus it happens that so many of our old

* See article thereon.

Town Halls are entirely on the upper floor and have a space open to the market underneath. Occasionally they are built solid from the ground like ordinary houses.

GUILLOCHE. An enrichment* consisting of two wavy bands interlaced (fig. 95).

GURGOYLE. *See* GARGOYLE.

GUTTAE (from Lat. *gutta*, a drop). Small projecting discs on the soffit of the Doric cornice; also truncated cones appearing to hang with the large end downwards from the fillet under the triglyphs. They are supposed to represent the pins used in a portico constructed of timber. (*See* ORDER, CLASSICAL.)

HAGIOSCOPE (Gk. ἅγιος, holy, and σκοπός, a watcher). A modern term for a small window, loop-hole or squint,* through which to watch an altar.

HALF-TIMBER WORK. *See* TIMBER BUILDINGS.

HALL. (1) The principal room in a medieval house; whence (2) a manor-house, and (3) the entrance vestibule of a house.*

HAMMER BEAM. A bracket forming part of the principal truss of an open timber roof.*

HANOVERIAN PERIOD. *See* RENAISSANCE ARCHITECTURE.

HELIX. A small leaf in the Corinthian capital*; two spring from each of the eight caulicoli.*

HERRING-BONE WORK. Walling in which a row of bricks or stones is laid sloping, followed by another row sloping the other way. It has been used occasionally at all periods from Roman times to the present day. The brickwork at the back of

* *See* article thereon.

a medieval fireplace was commonly worked in this way (fig. 114).

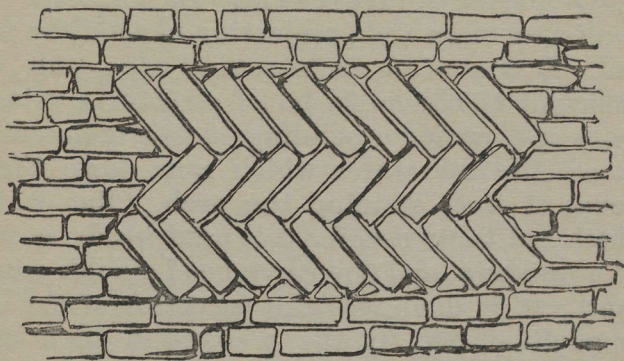


FIG. 114. HERRING-BONE BRICKWORK AT THE BACK OF A FIREPLACE

HEXASTYLE. *See* TEMPLE.

HIP. The salient angle formed by the intersection of two roofs (fig. 115, line *c d*.)

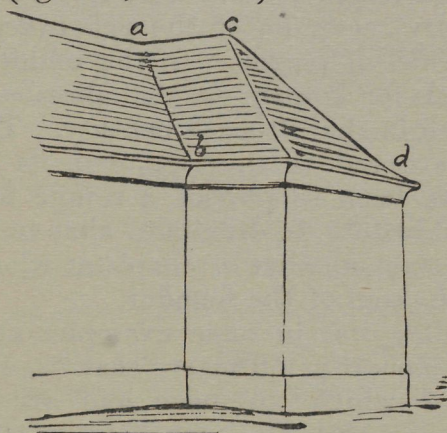


FIG. 115. A HIPPED ROOF. *a, b*, valley. *c, d*, hip

HIPPED ROOF. A roof* with hips (fig. 115).

HOLY-WATER STOUP OR STOCK. The basin for consecrated water was generally placed in a recess just east of the principal door of the church either inside or outside.

* See article thereon.

HONEYSUCKLE ENRICHMENT. An enrichment* of the Corinthian order (fig. 96).

HOOD-MOULD, DRIP-STONE, LABEL. The outermost ring of an arch, projecting beyond the face of the wall. It is used for architectural effect only, being of insufficient thickness to be of structural value. It is of some use outside a building if it is undercut, as it throws off the rain-water which runs down the wall and keeps it from staining the arch. But it is not this which led to its use, for it is used inside as well as outside a building, and the early hood-moulds were not undercut. It is doubtless the successor of the architrave-moulding used by the Romans in their arches. Its section generally corresponds to that of the abacus. (*See* MOULDING.)

HOSPITAL. The present sense of the word and the present character of the institution are both modern. Till recently there were no houses solely for the temporary reception of the sick except the 'pest houses' in times of plague. In the middle ages there were hospitals for leprosy till that disease disappeared from England in the fifteenth century. The medieval hospital ministered to the sick, but its first objects seem to have been to provide a refuge for the aged, infirm and destitute, to distribute alms to poor, and to support a certain number of chaplains who should sing masses for the soul of the founder.

The building was in some examples arranged like those of a monastic infirmary, that is, it resembled a church, of which the nave and aisles were the hospital proper and the chancel formed a chapel. The Great Hospital, Norwich (fig. 116), was of this type. In this instance the other necessary buildings are grouped round a cloister in a curious compromise between a monastery and a private house. In other hospitals (e.g. St. Cross, Winchester) the church is

* See article thereon.

quite distinct from the other buildings and the general arrangement somewhat resembles a college.*

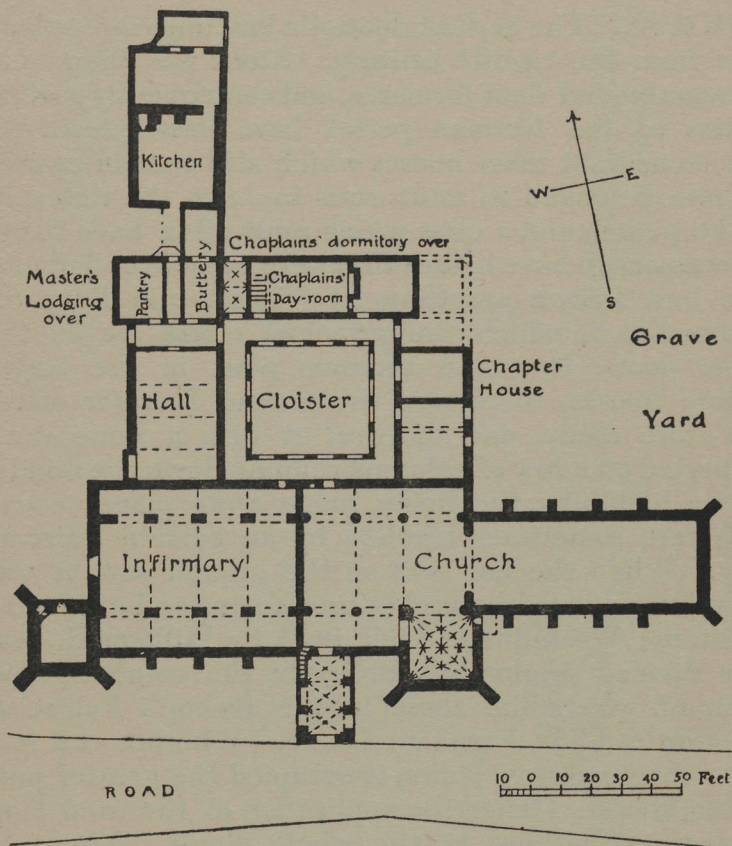


FIG. 116. A MEDIEVAL HOSPITAL, NORWICH

HOSTEL. An inn; also a dwelling-house for a number of persons, but not public, e.g. a house of residence for students; there were a considerable number of hostels of this sort at Oxford and Cambridge in the middle ages. (See COLLEGE.)

HOOR-GLASS STAND. An iron frame and bracket attached to a pulpit to hold the preacher's hour-glass.

* See article thereon.

Several seventeenth-century examples remain; they probably were not in use earlier.

HOUSE. The earliest domestic buildings in England date from the twelfth century. Stone was then more commonly used than formerly, and consequently several houses of the Norman period have been preserved. The stone-built town houses which still remain appear to have belonged in most cases to Jews, the rich men of the period, and a class which must often have found it necessary to have houses that were capable of defence. The best known are those at Lincoln and Bury St. Edmund's, in which the principal rooms are on the upper floor. It was a common plan, in the larger private houses, to reserve the ground floor for offices and store rooms, and to cover it with a stone vault supported on a row of columns running down the middle to the building; the living rooms were placed above and were sometimes reached by an outside staircase only. When the hall was on the ground floor it was sometimes divided by arches into a nave and aisles like a church; Westminster Hall, built by William II., was thus divided originally. Probably the columns were often of wood, like those in the Bishop's Palace at Hereford and in Farnham Castle. Whether the hall was above or below stairs, it occupied the greater part of the house. Hence the application of the word Hall in very early times to the whole house. The only other rooms were a cellar, not necessarily below ground, at one end of the hall with a room over it, and at the other end of the hall the kitchen offices.

It is in the reign of Edward I. that we see the gradual development of the typical medieval plan, which continued with but little change in its essentials till the time of Elizabeth (fig. 117). The medieval house consisted of a hall going the whole height of the building, with a wing of two storeys at each end (fig. 118). The hall had an open-timber roof, and

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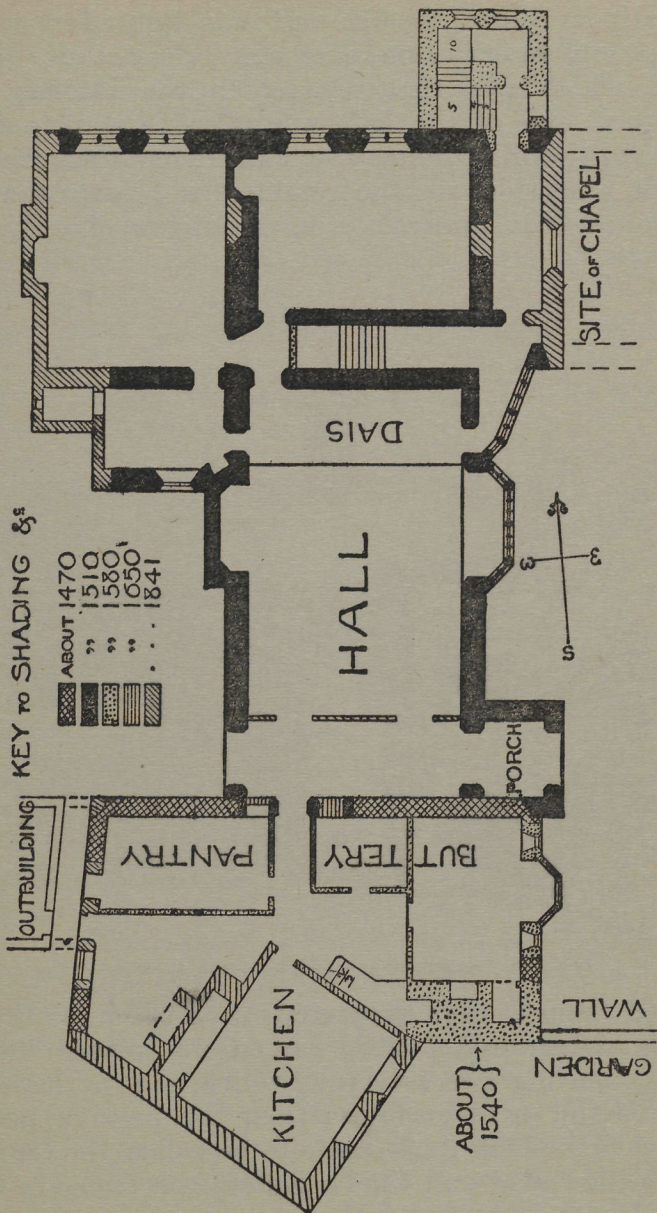


FIG. 117. TYPICAL MEDIEVAL HOUSE PLAN

usually a central hearth. It was lighted from both sides, and on each side there was a door at the 'lower' end, which was that nearest to the kitchen. The 'upper' end of the hall was raised a step to form a dais for the high-table, which stretched across the hall, while the tables for the retainers ran down the sides. To check the draughts from the doors, short screens,

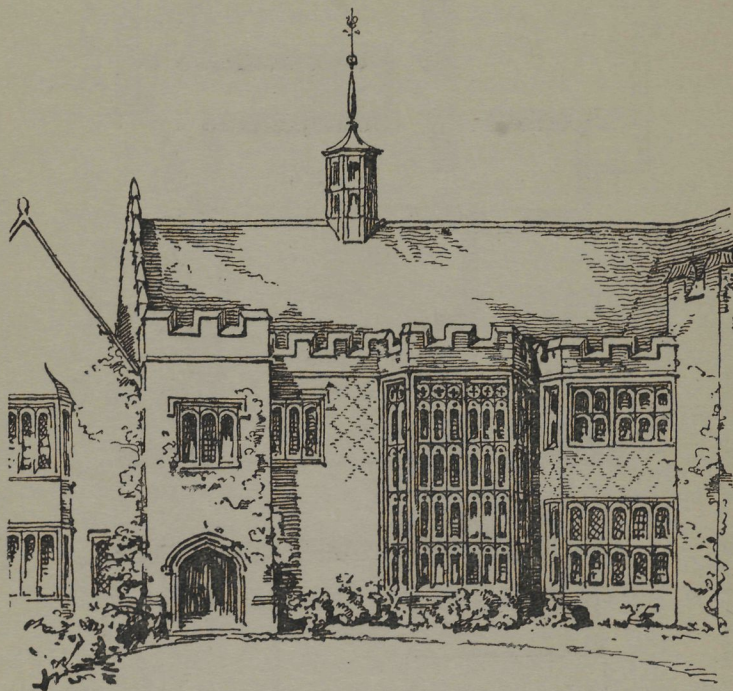


FIG. 118. A MEDIEVAL MANOR-HOUSE, HORHAM HALL

called 'spurs,' were projected from each of the side walls; afterwards a third screen was placed between them, leaving two intervals, which may perhaps have been hung with curtains; then the passage between the doors, which itself came to be called the 'screens,' was ceiled over and thus a gallery was formed; finally the intervals between the three screens were fitted with doors. The bay, or oriel window as we call it, is

another development of late times; it formed a convenient retired corner when houses had so few rooms.

The ground-floor room at the upper end of the hall was often a sort of store-room or cellar; over it there was the chamber or 'solar,' the private sitting-room and bedroom of the family, to which they could retire after supper, leaving the hall to the servants. The room sometimes commanded a view of the hall through a small loophole.

Large houses had a private chapel adjoining or near to the solar. In some cases a gallery extended over part of the chapel for the accommodation of the family, while the retainers sat below.

Returning to the lower end of the hall: the end wall beyond the screens contained two doors, one opening into the buttery, the other into a passage leading to the kitchen and larder; frequently there was a third door to the pantry, where bread, butter, etc., were served out. The rooms over the offices were probably bedrooms for women-servants, the men sleeping, as of old, in the hall; but there is still a good deal of uncertainty as to the sleeping accommodation for the opposite sexes.

The house was gradually enlarged by adding room to room, especially by extending laterally the wings at each end of the hall. In course of time this led to the formation of a courtyard surrounded by buildings, and sometimes of two courts, one on each side of the hall (fig. 119). From these three stages of development—the central hall with a projecting wing at each end, the single court, and the double court—the normal plan of later times was derived. The smaller houses, of course, continued the simple primitive arrangement more or less, according to circumstances. They were almost always of timber, as indeed were most of the larger houses except in districts where stone was the more easily obtainable.

The only other changes made in this plan during

the middle ages were in matters of detail, tending chiefly to the greater seclusion of the family. The solar becomes more important, and separate bedrooms are provided. The upper rooms at each end of the house, formerly separated by the high central hall, are now sometimes connected by a gallery built out from the side wall of the hall. The staircase remains an insignificant feature. Glass gradually becomes more

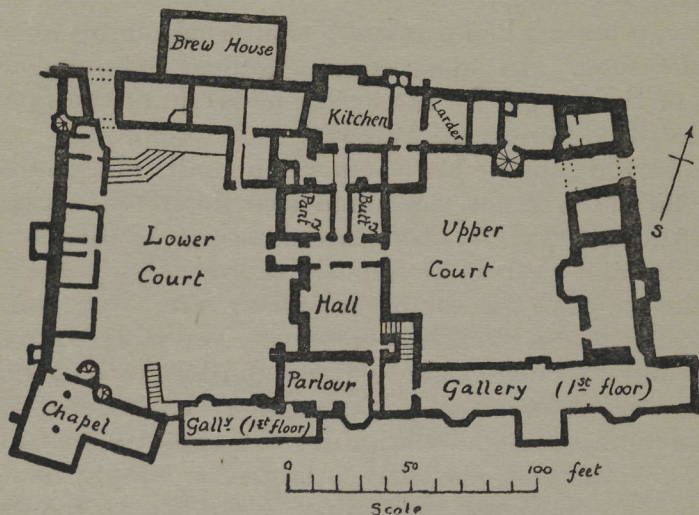


FIG. 119. HADDON HALL

common, the window is divided by a transom, the lower part having bars and a wood shutter to open, while the upper part had glass fixed.

The town house was less susceptible of variety in plan than the country house. The lower storey was usually a shop, and there was a somewhat insignificant staircase at the back to the living rooms above.

In the reigns of Henry VIII. and Elizabeth the larger country houses generally followed the courtyard plan. The plan of the smaller house, and sometimes also of the larger, assumes the well-known E shape, commonly supposed to be an allusion to the Queen's

name; but the arrangement is simply a central range with a wing at each end and a porch in the middle, a plan which has been common at all periods. The fourth side of the court was left open or was closed only by a wall with a gateway.

The rooms at either end of the hall are now more conveniently arranged. Though many rooms still open out of one another, and some rooms, even bedrooms, cannot be reached without passing through several others, they are ingeniously grouped and are connected by wide galleries, and numerous staircases are distributed about the building. The galleries occupy one side of a range, not the middle like a modern passage with rooms on each side. They are a development of the light covered ways which connected various parts of a large medieval building, and they form an important step towards the modern compact block of building as distinct from the medieval narrow and straggling range. The gallery built on the upper floor behind the hall, with small rooms or an open colonnade below it, becomes the great picture gallery, which is one of the most striking features of the Elizabethan and Jacobean house.

The hall has now become little more than an entrance-hall and lounge, though it retains its former grandeur and is still used for Christmas revels. The stately reception-rooms on the upper floor necessitated a corresponding enlargement of the staircase which had hitherto been rather a neglected feature. It is still kept apart and separate from the hall. It is wide, massive, and richly decorated with carving. The screen, though often now of no use, is retained as an ornamental feature. Fireplaces have become universal in private houses, and splendid marbles and luxuriant carving are lavished upon them. It is only in a few college halls that the primitive central brazier and lantern on the roof are still used.

Inigo Jones broke entirely with the traditions of the

past in his plans as in his architecture. The house becomes a solid block instead of a narrow range with numerous projections and broken outline. All the reception-rooms, as they were now called, were placed on the upper floors. The offices were placed in a basement below them. The main floor was reached by a

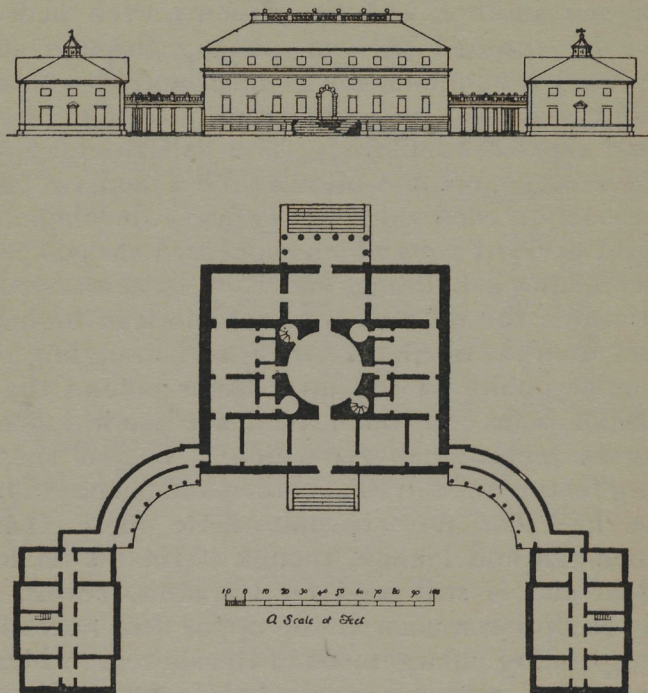


FIG. 120. THE EIGHTEENTH-CENTURY PLAN, GOODWOOD

wide flight of stone steps outside the house. The inside staircase, leading only to the bedrooms, is treated as simply as possible.

For the largest class of country house the favourite plan of the eighteenth-century architects consisted of a central block connected with low advanced lodges by quadrant galleries (fig. 120). These advanced wings usually contained on one side the laundries and so on,

and on the other side the stables. The reception-rooms were often effectively grouped, but the arrangement of the bedrooms is still defective.

HUNTING TOWER. A tower built in a park in Elizabethan days from which ladies could watch deer-driving.

HUTCH. A chest.*

HYPÆTHRAL TEMPLE. A temple* which is partly open to the sky.

HYPOCAUST. A heating-chamber under the floor of a Roman house in Britain and elsewhere. There are two principal varieties: the pillar hypocaust and the channel hypocaust. In the first the floor of the room, which is of concrete, is supported on small brick columns. The low underground chamber thus formed had a stoke-hole outside the building, and very small flues from it were carried up the walls in different angles of the room. In the channel hypocaust the concrete floor rests on the ground, and flues are formed under it, radiating from the stoke-hole to the various vertical flues.

IMAGE. This term was in the middle ages often applied to a painting as well as to a statue; both painter and sculptor were called 'imageour.'

IMPOST. A flat horizontal projecting stone placed at the springing of an arch (fig. 121).

INCENSE SHIP. A vessel of silver or any other metal of boat-like shape in which was kept the incense to be burned in the censers in a medieval church.

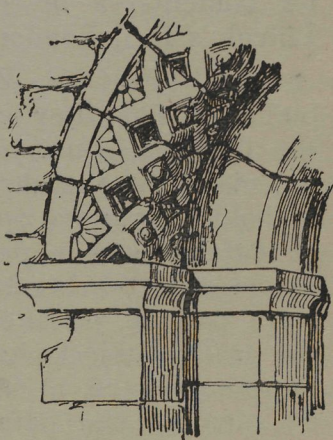


FIG. 121. IMPOST AND ARCH
ALSOP-IN-THE-DALE

* See article thereon.

INCISED SLABS. *See* MONUMENT.

INFIRMARY. (1) A hospital* for the sick. (2) The department of a monastery* in which the old and infirm, the sick and those who had been recently bled were received.

INN. (1) A house of public entertainment. The inns of the middle ages appear to have been poor and uncomfortable; the monasteries and the town and village guilds supplied, and probably well supplied, the wants of the traveller. But the suppression of the monasteries and guilds and the increase in the number of travellers brought about an improvement in the inns in the sixteenth century. The ordinary Elizabethan hostelry is built entirely of timber and presents a street front similar to the private house except that it has a large archway leading through to a courtyard. The court is square or more commonly long and narrow, and it is surrounded by an open gallery at the level of each storey. The lowest rooms are offices; the bedrooms for guests are on the upper floors and open on to the galleries. (2) A place of residence for students, a hostel. (3) A sort of college, e.g. Lincoln's Inn, London.

INSCRIPTION. Writings of all ages are found on buildings but they are rare till the latter part of the fifteenth century. The buildings of that period, especially the churches, sometimes have an inscription in bold characters running round the plinth, parapet or cornice; and in painted windows the figures often hold scrolls bearing texts. At the Reformation texts were painted on the walls of churches in place of the earlier subject pictures. Great Elizabethan houses sometimes have an inscription round the top formed by piercing the parapet so as to leave the letters silhouetted against the sky like a 'sky-sign'; texts

* See article thereon.

and moral sayings are sometimes painted on the walls of the rooms, such as the following:—

Wysdom knowledge and understanding
Ar the sowles most gloryus clothing
Gene the glory to god only.

Church bells almost always have an inscription, and post-Reformation communion-plate generally has the name of the parish. (*See* MONUMENT.)

INTERCOLUMNIATION. The distance apart at which the columns of a portico are placed. (*See* TEMPLE.)

INTERPENETRATIONS. The system of making mouldings intersect, so that they appear to run through one another; practised in England in the fifteenth century, but more common in work of that period on the Continent (*fig.* 122).

INTRADOS. *See* ARCH.

IONIC ORDER. *See* ORDER, CLASSICAL.

IRONWORK. In England as in France, the art of the smith reached a high level in early times. The designs are bold and well suited to the material, and the workmanship is excellent. Most of the examples of an early date that now remain are hinges of doors. Each hinge generally consists of a horizontal band carried right across the door, with scrolls branching out from it. Besides the two hinges there is often a central band which is similarly treated. Thus the whole door was more or less covered with ironwork which added to its strength and produced a rich effect.

In the first half of the eleventh century the commonest type of hinge has the central band, with branches springing out from it abruptly from behind the stonework and forming a crescent. Mystic figures such as the swastica and grotesque animal heads which

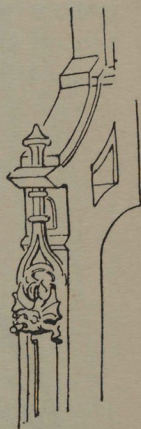


FIG. 122.
AN INTERPENE-
TRATION

occur are probably due to the Danes, and there are also representations of Vikings' ships. The door is sometimes surrounded by a plain or ornamental band of iron. Norman work has the same general character; the scrolls sometimes end in elaborate spirals, and geometrical patterns are used. The most remarkable example remaining is the fragment preserved in Winchester Cathedral, one of the few remains of the grates which were once common. It formerly protected the shrine of St. Swithun and is thought to date from 1093. (GA.)

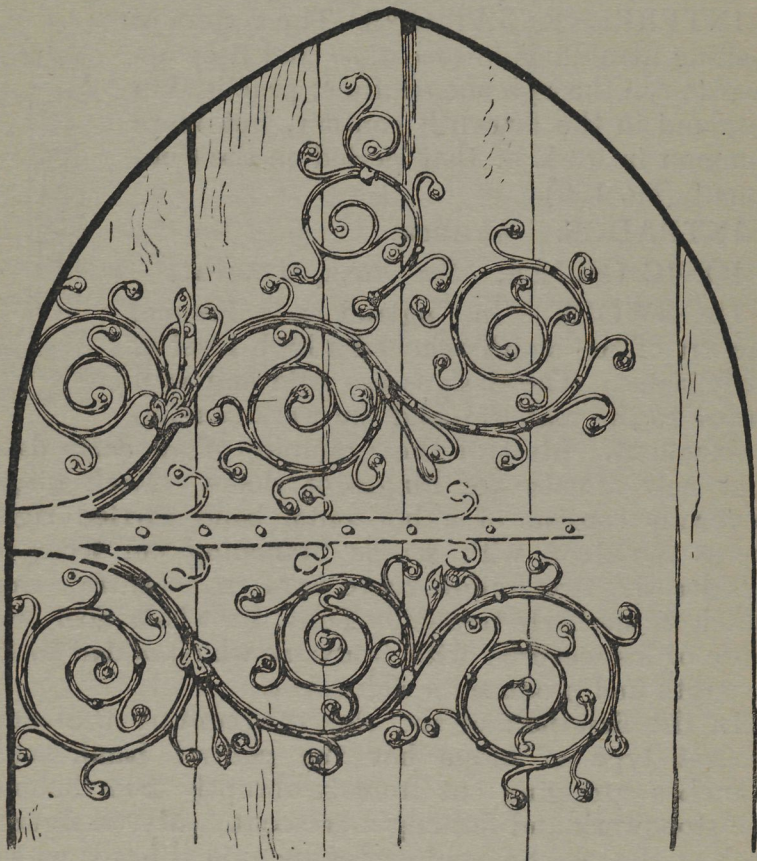


FIG. 123. A THIRTEENTH-CENTURY HINGE, REEPHAM

In the thirteenth century the branch work is more elaborate and the spiral is more commonly used; the crescent is less pronounced or is abandoned, the curve of the branches being in the opposite direction. Animal forms give place to those of foliage, the branches are often ribbed and the ends modelled into leaf-like forms (fig. 123). The screen of Queen Eleanor's tomb in Westminster Abbey by Thomas de Leghtone in 1294 is a rich and characteristic example.

In the fourteenth century the making of ornamental door hinges died out, probably owing to the practice of decorating the wood-work. A good

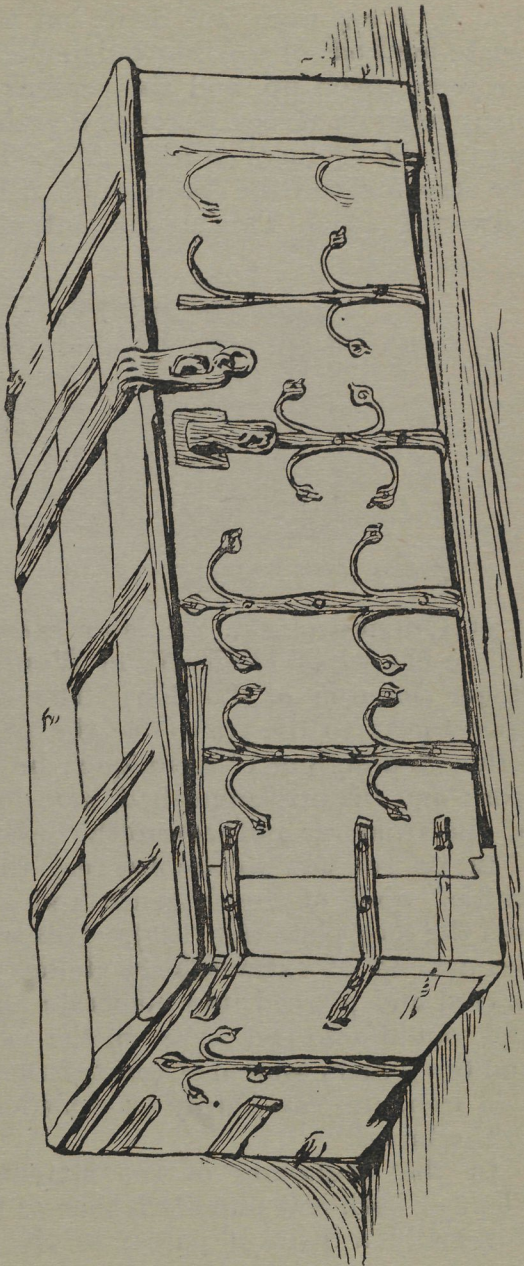


FIG. 124. CHEST, MEOLE BRACE CHURCH

deal of screen-work was done, but the old and appropriate methods of welding and modelling the iron while hot were given up, and the screens were built up of many separate pieces, fastened together with tenon and mortice like joiners' work. A good early example is the screen round the shrine of St. Alban, of the time of Edward I. (GA.) This method, introduced from Venice,

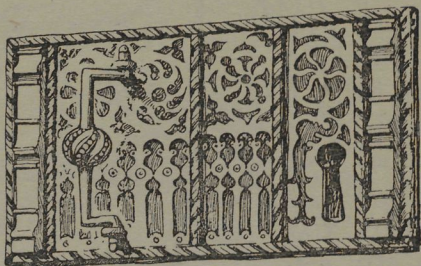


FIG. 125. LOCK PLATE, KING'S COLLEGE CHAPEL, CAMBRIDGE

is of Oriental origin. A later example is the screen of the chapel of Henry V. in Westminster Abbey, by Roger Johnson of London. The system gave little opportunity to the smith for the practice of his skill either in design or in technique; he lost interest in his work and his art languished, save in the departments of the armourer and locksmith. (GA.)

In its relation to architecture the most important smiths' work of the fifteenth and sixteenth centuries was the lock plate (fig. 125). This was a work of great beauty and of extraordinary delicacy, chased and engraved and pierced into elaborate and minute tracery, and sometimes even carved in the solid. All this work and the joinery system of construction were done on the cold iron, and can hardly be considered as appropriate to the metal.

In the beginning of the sixteenth century some Flemish work was imported, such as the piece of work (originally a pair of gates) in St. George's Chapel,

Windsor, and the gates to Bishop West's chapel in Ely Cathedral, and such examples no doubt influenced English design. But English ironwork became practically extinct as an art. Very simple railings with ornamental cresting and finials were made to protect monuments, as they had been throughout the middle ages. (GA.)

The supporting irons of inn-signs and weather vanes were elaborate and decorative, and carried on the old traditions. Except for these only small objects such as casement fasteners, hinges of small doors, and keyhole scutcheons (fig. 126), were made in Elizabethan and Stuart times.

It is an interesting circumstance that an elaborately decorative treatment of wrought ironwork should have been revived at the end of the eighteenth century when the severest classicism held sway. But already was the nation beginning to break away from these bonds, and the splendid gates made for Hampton Court by a Frenchman, Jean Tijou, in 1690, set a fashion which immediately spread over the whole country and revived the art, as it were, at a stroke (fig. 127).

The new style was very limited in its application. It was almost confined to gates, generally with elaborate fixed compositions over them, and the like. Good examples are to be found in front of many suburban houses both of London and provincial towns; the scrolls on the top of the area railings of town houses at the point where they join the house wall on either side of the front door are generally good designs of the same school. Ornamental hinges were never used, and all the internal metal work of the house was of brass.

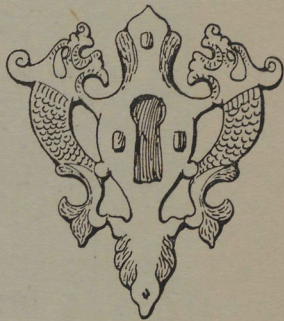


FIG. 126. A KEYHOLE
ESCUTCHEON, DATED 1622

The most obvious characteristics of the style are: the frequent use of leaves, either the acanthus or one with



FIG. 127. HEAD OF GATE, CLARE COLLEGE, CAMBRIDGE
Eighteenth century

crinkled edges like an elongated dock-leaf; the use of the C spiral, and of a spiral of which the outermost coil is sharply bent in (fig. 128) and then curved to form a new spiral in an opposite direction; the absence of the S spiral and of geometrical or architectural forms.

Ornamental wrought ironwork died out almost as suddenly as it had been revived, early in the nineteenth century. This was no doubt due partly to the increase in the use of cast-iron, but probably still more to the general meanness of the architecture of the time. There is no reason why cast-iron should supersede wrought, indeed there are many reasons why it



FIG. 128. AN
EIGHTEENTH-
CENTURY SCROLL

should not do so; the two are in no way rivals and serve quite different purposes. Castings have in late times fallen into discredit through their use for unsuitable purposes and through the coarseness and hideousness of the designs. But for many years after its introduction cast work was designed with robust good sense. The earliest examples appear to be the fire-backs ornamented with reliefs of mythological subjects and other devices; they are generally rather clumsy designs in low relief, quite good enough for their situation. There are some examples of the sixteenth century, while those of the seventeenth are common. All through the eighteenth century and during the earlier part of the nineteenth century grates and similar objects are treated with the greatest delicacy and judgment. These works kept to the old traditional ornaments, and the old founders seem to have understood the importance of keeping their decoration minute and in very low relief. Heavy cast-iron railings of good design were also used early in the eighteenth century, as at St. Paul's Cathedral. Cast- and wrought-iron were sometimes used together, as in some wrought railings where the principal standards have little vase-shaped cast finials.

Until recent times smelting furnaces in which the iron is extracted from the ore were heated with charcoal because of the difficulty in getting a blast sufficiently strong for coal. Consequently the furnaces were situated in well-wooded districts such as Surrey and Sussex and the Forest of Dean. Forges, some of which are still working, were, it is said, founded by the Cistercian monasteries, such as Tintern, Kirkstall and Furness. Restrictions were put on the felling of timber by Parliament which apprehended danger to the State from the rapid destruction of forests; iron was consequently imported, especially from Spain and afterwards from Sweden. Some smelting with coke

was done in 1624, but it was not till about 1750 that the process was generally understood and employed. At that time the chief output was from Cheshire, Gloucestershire, Hereford, Salop and Worcester; the Sussex trade was declining. By 1785 the use of charcoal was entirely abandoned and works were moved to districts where coal for fuel and water-power for the blast could be obtained. A few years later by the application of the steam-engine the difficulties of the blast and consequently of fuel were finally surmounted, for it was now possible to use crude coal. From this time the trade began to assume its modern proportions.

JAMB. The face of a recess or opening in a wall.

JESSE WINDOW. A window filled with painted glass representing the descent of Our Lord from Jesse. The latter is represented prostrate at the bottom of the window, and from his body springs a tree on the branches of which are figures of his descendants, and at the top Our Lord. They are chiefly of the fourteenth century. A good example is the east window of St. Mary's Church, Shrewsbury. At Dorchester Church, Oxfordshire, stone branches spring from the mullions.

JOIST. One of the small timbers of a floor on which the boards immediately rest.

JULIET. *See* CASTLE (p. 35).

KEEP. The stronghold of a medieval castle.*

KENTISH TRACERY. *See* TRACERY.

KEYSTONE. The central stone of an arch. It is seldom used in Gothic work in England, our pointed arches generally having a joint at the apex. In Renaissance architecture there is always a keystone; it sometimes projects as a bracket to carry the entablature.

* See article thereon.

KING-POST. *See* ROOF.

KITCHEN. In the middle ages the kitchen was generally a large building with one or more wide ranges, proportionately to the large number of retainers who eat in the hall. In monasteries they are lofty, with open timber roofs; these and also, it would seem, those of the larger houses were often detached and connected with the other offices by a covered way.

LABEL. *See* HOOD-MOULD.

LADY CHAPEL. The altar of the Blessed Virgin was at first placed in any convenient position; it was only in the fourteenth century, when the adoration of her so much increased, that it became common to build a large special chapel. This was an almost detached building at some cathedrals and large monastic churches, as Hereford, Westminster (Henry VII.'s Chapel), and Ely, and (though very rarely) at some parish churches, such as Long Melford. The Lady chapel, in this later development, was in most cases at the east end of the presbytery. For parish churches and the smaller religious houses it was more usual to lengthen the aisle, thus forming a large chapel alongside the chancel.

LANCET. A high narrow window used in the end of the twelfth century and beginning of the thirteenth century; the earliest examples have round heads.

At the side of a building they are used singly or in groups of two or three, but in gable-ends, as the east ends of churches, there are three, five or seven. The glass is generally near the outer face of the wall and there is a wide splay inside. The inner arch is often distinct from the outer arch, and drops down in front of it, and is called a 'drop-arch.'

LANTERN. (1) A small wood tower on the ridge of the roof of a medieval hall or other large building

to provide an outlet for the smoke from the central hearth (fig. 118); in the middle ages called a louver.*

(2) An open-work erection of timber or stone found on a few church towers, such as that at Newcastle-upon-Tyne. The unique central tower of Ely Cathedral, the upper part of which is of timber, is called the Lantern.

(3) A tower of which the whole or a considerable part is open to and visible from the floor, as for instance, the central tower of Durham Cathedral.

LARDER. Old French *lardier*, a tub to keep bacon in (from Lat. *larda*, lard); hence a room in which to keep bacon and meat (s.). Before the introduction of turnips and other winter food for cattle it was necessary to kill in the autumn, while they were still fat, as many animals as would be required to provide food for the household till the following spring. The larder therefore had to be large enough for larding or salting and hanging great quantities of meat.

LATTEN. Germ. *latte*, a lath, thin plate, "because this metal was hammered out into thin plates" (s.). A mixed metal resembling brass frequently mentioned in medieval inventories, etc., composed chiefly of copper and zinc. A Flemish brass of 1504 which has been analysed gives the following result: copper 64 per cent., zinc $29\frac{1}{2}$, lead $3\frac{1}{2}$, tin 3 (MA). It was used for engraved monumental brasses, cast effigies such as those in Westminster Abbey (*see* MONUMENT, p. 170), and for the less important utensils in churches and for ordinary domestic utensils.

LATTICE (Germ. *latte*, a lath). An open-work screen made of laths, generally used to fill a window which had not glass, hence diamond panes in lead are called lattice-work. The wood lattice was probably very common when glass was expensive. (Cf. Second Part of *Henry IV.*, II., ii., 86.)

* See article thereon.

LAVATORY. The only lavatories of which any account need be given here are those in the religious houses, though a stone wash-hand basin is occasionally seen in a medieval house and in the sacristy or other part of a church, as at Salisbury Cathedral. The monastic lavatory was in the cloister near the door to the refectory, so that the brethren could wash their hands before and after meals. The most common arrangement consisted of a long stone trough in a recess in the wall opposite the windows as at Norwich, and the towels hung from rollers near by. At Westminster Abbey the lavatory is a small room opening out of the west alley in the bay next to the angle, while the towels hung in the corresponding bay of the south alley. At Durham it was an octagonal building projecting into the cloister-garth with the basins in the middle.

LAZAR-HOUSE. A hospital for lepers on the outskirts of a medieval town. The chapels of some still exist; there is a good example at Cambridge. There are no remains of any of the domestic buildings.

LEADWORK. Lead was used for covering roofs in early Saxon times and all through the middle ages, but not quite so extensively afterwards except on domes. There are about thirty lead fonts* in England chiefly of the Norman period, most of them in the southern counties (L.). Till the nineteenth century lead formed the material for cisterns, pump-heads, rain-water-heads* and pipes, and received appropriate decoration in relief. In the seventeenth century gardens often contained admirable lead vases and statues. The mode of manufacture consisted of casting into sheets and building up these into the required form, or casting the object entire in one piece, according to its size and character. The material

* See article thereon.

is now little used except for roofing, and rolling has almost entirely superseded the old method of casting. (See GLASS.)

LEAN-TO. See ROOF.

LEAVES. A medieval term for the folding-doors of a cupboard or of a wooden reredos. (See TRIPTYCH.)

LECTERN (Low Lat. *lectrinum*, a reading-desk; no connection with 'lecture.' s.) In medieval churches a lectern stood at the north end of the high altar for reading the epistle and gospel from, and there was another in the middle of the chancel for music-books (M.). There were generally two desks made to turn on a single column; sometimes the book rested on the outstretched wings of an eagle or a pelican; generally the latter were of bronze and the simple desks of wood. The lectern appears to have been superseded by the reading-pew in 1603, and its reintroduction into Anglican churches is so recent that in Parker's *Glossary*, published in 1850, it is described as a desk "used in the services of the Roman Catholic Church."

A lectern or reading-desk of some form was provided in a college hall, and in the frater or refectory of a monastery,* where it was often a sort of stone pulpit, sometimes very elaborate, bracketed out from the wall.

LENTEN VEIL. A curtain which, before the Reformation, was drawn across the chancel in front of the altar during Lent.

LIBRARY. In England, as elsewhere, the only collections of books in the early middle ages were those of the religious houses. The cloister was the living-room of the monks, and as almost every hour which

* See article thereon.

was not spent in the church was devoted to reading and copying, the cloister was the library. The books were kept in a cupboard called the *armarium*, formed in the thickness of the wall in the east walk of the cloister, between the door of the church and that of the chapter-house, as at Norwich and Kirkstall, or in the east part of the north walk, as at Ely. The precentor, acting as librarian (*armarius*), gave out books to the brethren; books were also lent to other houses, to churches and to private persons.

The windows of the cloister were in early times not glazed, and in order to give the monks some protection from the weather little studies scarcely larger than sentry-boxes were erected. These were called carrells. Each of them accommodated one person and contained a desk and stool. They are first mentioned in the latter part of the thirteenth century. At Gloucester recesses or carrells of stone were formed against the windows when the cloister was rebuilt between 1370 and 1412.

As books increased in number it became necessary to provide more accommodation for them; the Benedictines made detached wooden presses; the Cistercians commonly cut off a portion of the sacristy which was at the end of the south transept, as at Kirkstall, Tintern, and Netley, and later they formed two rooms at the west end of the chapter-house, one on either side of the entrance, as at Furness and Fountains. These rooms and presses becoming after a time insufficient, various other rooms were fitted up for the storage of books, which thus became inconveniently scattered. But it was not until the fifteenth century that special rooms were provided; these were generally built over some already existing building, such as the cloister or the sacristy at the end of the south transept; they were for the storage of books only: reading continued to be done in the cloister. The libraries of secular cathedrals of the

fifteenth century were built over a part of the cloister, as at Lincoln, Salisbury, St. Paul's, Wells and Hereford, or were detached buildings as at Lichfield. Some at least of these libraries were used by the canons as reading-rooms.

Old Library arrangements may best be studied at the ancient universities. Books were lent to students on deposit of a pledge before colleges were founded and colleges themselves had libraries (that is, collections of books) from very early times. The erection of a library in the sense of a special building to contain books was an afterthought, the books being originally kept in chests along with muniments and other valuables. The first college which contained a library among its original buildings was New College, Oxford, founded in 1380; in every college founded after this, a special room was provided. The position varies in different foundations, but it was generally if not invariably on the upper floor. It may be easily recognised from the outside by its uniform range of windows placed rather close together, on both sides of the building.

The interior arrangement was as follows. High substantial desks about six feet long with a steep slope projected from the pier or piece of wall between each pair of windows on either side of the room, leaving a passage down the middle. These desks were double, that is, there were two slopes, back to back, like a double lectern in a church, and this sort of desk has been called the lectern-type. There were no shelves, the books lay upon the desk and were secured against removal by an iron chain which was fastened to some part of the cover like an ordinary clasp; the other end of the chain was connected by a ring to an iron bar just above the desks; the end of this bar was fastened with a lock in such a manner that the ring could not be slipped off. Between each pair of these double

desks there was a bench for the use of readers. This system was common, with variations, to England, France, Holland, Germany and Italy.

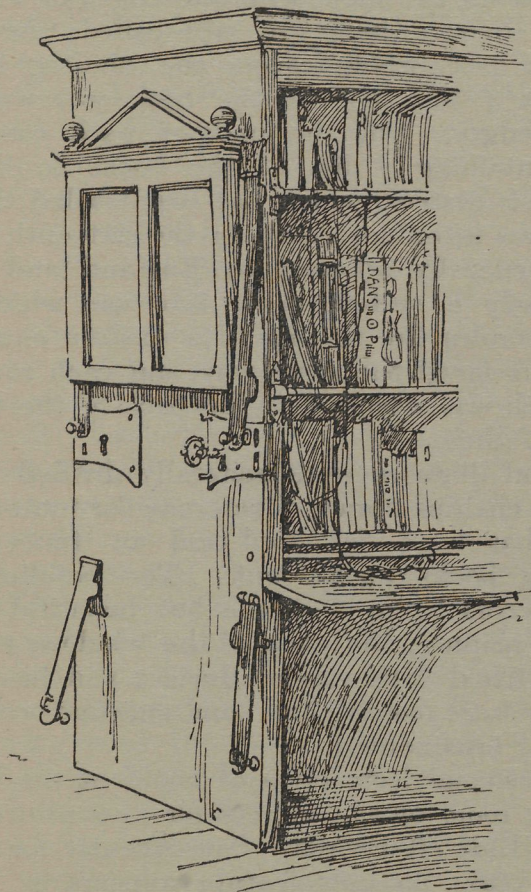


FIG. 129. A BOOK-CASE OF THE 'STALL' TYPE, HEREFORD

The lectern-system was extravagant of space, for each double desk would accommodate only from fifteen to twenty volumes. It was modified by separating the two halves of the desk and placing shelves above them (fig. 129). The books were still chained;

the bars to which the chains were attached were placed just in front of each shelf; the chains were fastened to the front edge of the book cover, and the book was placed on the shelf with the edges of the leaves outwards, hence these are still called 'fore-edges,' while the part which covers the binding is called the 'back'; the title of the book was written on the fore-edges. On the end of each case was a frame containing a list of the books to be found in it. This system, which has been called the 'stall system,' was introduced early in the sixteenth century. It was generally adopted in England and France, but in Italy a system came into use which somewhat resembles the seating of a modern church; all the readers faced the same way, and each row used a desk which was attached to the back of the row next in front of them.

Medieval libraries were generally divided into two classes: a chained library of reference or 'outer library' such as has been described and an 'inner library' containing books to be lent. The buildings were usually decorated in a simple but beautiful and appropriate manner, the glass of the windows especially being enriched with various devices and inscriptions. The desks were massive and handsome and occasionally elaborately ornamented.

The enormous destruction of books at the Reformation made room on the shelves for new printed books for a long time afterwards. Consequently for the next hundred years no new feature appears in libraries. But towards the middle of the seventeenth century chaining was generally abandoned, and it was therefore unnecessary to have seats between the desks. A seat is sometimes attached to the book-case; the desk is gradually given up, and the shelves are continued almost to the floor.

But in the seventeenth century a more important

change was made than mere modifications in the form of the book-case. The whole arrangement of the library altered. Instead of projecting from the walls into the middle of the room, the bookshelves were now placed against the wall. This plan had been developed on the Continent, and was introduced at the Bodleian Library, Oxford, in 1610-12. It was used by Wren at Lincoln in 1674 and at St. Paul's in 1708; at the latter the upper shelves are reached from a gallery. At Trinity College, Cambridge, Wren combined in a masterly fashion the new system of cases against the walls with the old system of projecting stalls; the stalls were placed in this instance at considerable intervals, thus forming a series of cubicles, with a table and chairs in the middle of each. The new arrangement required that the windows should be placed high in the wall; it was thus inapplicable to the old buildings which had low windows; in these, therefore, the old arrangement was preserved, even when they were fitted up with new furniture.

Private collections in the middle ages were small and easily accommodated. In the twelfth century books were kept in a chest, on the edge of which they were rested when being read. In the fourteenth and fifteenth centuries they were kept in a cupboard; while being read the book was laid on a desk, the support of which was in the form of a screw, so that the desk could be raised or lowered by turning it round like a modern music-stool. Another form of private lectern had no screw, but the supporting standard was cranked, so that the desk could easily be pushed aside. An infinite variety of lecterns in private rooms may be seen in the pictures in medieval manuscripts. (J. W. Clark, *The Care of Books*.)

LICH-GATE (from Middle English *lich*, a corpse). A churchyard gateway with a roof over it, under which the bier might be rested at a funeral.

LIERNE RIB, LIERNE VAULT. *See* VAULT.

LIGHT OF A WINDOW. The part of a window between two mullions; thus a window with two mullions is called a three-light window; each piercing in the head is called a tracery-light.

LINEN PATTERN. A decoration used on panels in the sixteenth and seventeenth centuries, consisting of shallow mouldings almost covering the panel; so named from a supposed resemblance to folded linen.

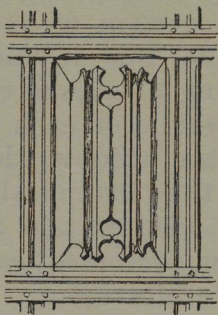


FIG. 130. LINEN PATTERN

LINTEL. A horizontal piece of stone, wood or other material placed over a door or window or over columns to support the weight above.

LITANY DESK. This was introduced into English churches apparently in the reign of Mary or of Elizabeth.

LOBBY. An inner vestibule or ante-chamber.

LOCK. *See* IRONWORK.

LOCKER. A small cupboard in a wall. (*See* ALMERY.)

LOCUTORY. The parlour of a monastery.*

* *See* article thereon.

LOFT. An upper room, a gallery (e.g. rood-loft); now usually a room in the roof of a barn or stable.

LOGGIA (Ital. *loggia*, a lodge, an open gallery). A small building forming a shelter, with open arches on one or more sides; much used in Italy.

LONG-AND-SHORT WORK. The method of forming angles of stone walls in late Saxon times, in which flat horizontal slabs alternate with tall pillar-like stones (fig. 131). The quoins projected a little from the face of the wall, but their rough ends were sunk or 'rebated,' and the plaster which covered the wall was

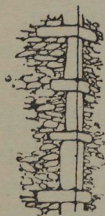


FIG. 131.

LONG-AND-SHORT QUOINS

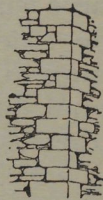


FIG. 132.

ORDINARY QUOINS

carried over the rough edges, thus leaving a pilaster of uniform width at the angle of the building; and so until the plaster was hacked off at the recent 'restoration' of buildings, the quoins appeared to be of uniform width and alternately long and short, whence the name.

LOOP. A narrow window in the parapet of a castle for the discharge of arrows, or in a small staircase or chamber to admit light, or in a barn for ventilation.

LOUVER (formerly **LOVER**, from Old French *louwert*, an opening, put for *l'ouvert*—s.). A ventilator on the roof of a medieval hall, a lantern.* The sloping boards which are placed in the louver and in belfry windows are also called louver-boards.

* See article thereon.

LOW-SIDE WINDOW. A name recently given to the window commonly found near the west end of a chancel, usually in the south wall, but very often in the north wall. It differs from other windows of a church, the commonest type having a sill considerably nearer the floor, and the lights being divided by a transom, below which there are bars and a shutter, but no glass, while the upper part is glazed like other windows. Some few examples are on a level with the floor. In some chancels which are raised very much above the ground the window is quite inaccessible from the outside.

The use of these windows is unknown. Many guesses have been made, but few have any approach to probability. Referring to some few of them, it may be said that they were not for handing out to lepers the sacramental bread (they used to be called 'leper windows' a few years ago), nor for allowing lepers or others to watch the Mass, nor yet (though this is much less improbable than any of the above) to allow a small hand sanctus-bell, rung at the elevation of the Host, to be heard by those who happened to be near. The latest theory is that a lantern was placed in the window, the light of which gave protection from evil spirits to the dead who lay in the churchyard (HN.). Though there are some objections to this view, it is not impossible.

LOZENGE MOULDING. An enrichment used in Norman architecture, consisting of lozenges in relief placed end to end.

LUCARNE. A dormer window.*

LUNETTE. A round or oval window in a ceiling, vault or dome.

LYCH-GATE. *See* LICH-GATE.

LYCHNOSCOPE. A low-side* window.

* See article thereon.

MACHICOLATIONS. Boldly projecting corbels * carrying the parapet of a castle wall, openings being left between the corbels so that defenders behind the parapet could shoot at or throw down missiles on an attacking force (fig. 133.)

MANSARD ROOF. *See* ROOF.

MANSE. The house provided for a clergyman in Scotland. The term was formerly used in the same sense in England.

MANTELPIECE. *See* CHIMNEY.

MARBLE. A limestone which has been subjected to such great natural heat as to lose entirely all trace of fossil remains and other characteristics of its original structure. Many varieties of English limestone are called marbles because they will take a polish, e.g. Purbeck marble. True marbles are found in Devonshire and in Ireland, but are little used in building. In the middle ages Purbeck was very popular, but true marble, either British or foreign, was very rarely used. In the reign of Elizabeth a good deal was imported for fireplaces in great houses and for monuments in churches. Much larger quantities have lately been used owing to the reduction in price due to the application of machinery for sawing it up and to the rediscovery of long-lost quarries in Greece.

MARKET CROSS. No doubt these were originally simply devotional crosses, like those of the churchyard and wayside, erected for the protection of the town. They afterwards became large and elaborate, and were surrounded by columns supporting a roof above which

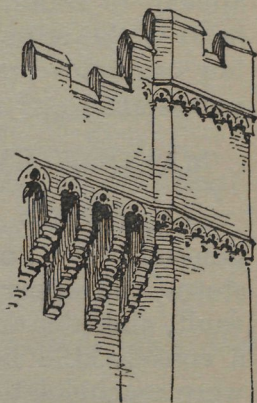


FIG. 133
MACHICOLATIONS
FARNHAM CASTLE

* *See* article thereon.

rose the cross. These probably are due to a shelter having been erected over the cross itself, and some appear to retain their original character though the head of the cross has always been destroyed. In some few examples the shelter has an upper chamber. (See GUILDHALL.)

MARQUETRY. Inlaid work of wood or ivory.

MARTELLO TOWER. A small circular tower, generally two storeys high. The lower is intended for stores, the upper for troops; the roof had a shell-proof vault, and was armed with artillery; the entrance was a considerable height above the ground, and over it were machicolations*; the building was generally surrounded by a ditch and glacis. Many of these towers were erected on the south coast and in Ireland, Jersey and elsewhere during the Napoleonic wars. The name "is supposed to have been derived from that of a fort in Mortella (Myrtle) Bay, Corsica, which after a gallant resistance was taken in 1794 by a British naval force. After a period of disuse many of these towers have recently been supplied with an improved armament." (*English Cyclopædia*, 1860). Needless to say they are now entirely dismantled.



FIG. 134.
MASK-STOP

MASK-STOP. A peculiar termination to a hood-mould used in the thirteenth century; some examples have a slight resemblance to a human face (fig. 134).

MAUSOLEUM. A private building intended to contain one or more tombs. So called after the magnificent sepulchre erected by his widow Artemisia in memory of Mausolus, King of Caria, in Asia Minor, who died 353 B.C.

* See article thereon.

MEGALITHIC MASONRY. Prehistoric work in which stones of very great size are used, such as Stonehenge.

MERLON. One of the higher parts of a battlement.*

METOPÉ. A space between two triglyphs in the Doric frieze. (*See* ORDERS.)

MEMBER. A single item in a series of mouldings.

METAL-WORK. (*See* IRONWORK, LEADWORK, LATTEN.)

MEZZANINE. (*See* ENTRESOL.)

MEZZO-RELIEVO. (*See* RELIEVO.)

MID-WALL SHAFT. A single shaft dividing the lights of a Saxon* belfry window.

MINSTER (shortened form of *monasterium*, a monastery). The term is now habitually applied to certain cathedral churches, e.g. York, which was not monastic, while some which were monastic churches are not so called. It is a component part of some place names (e.g. Whitminster) and may indicate the presence of monks in early Saxon days.

MINARET. A tall thin tower of a mosque.

MISERERE (from Lat. *miserari*, to pity). A peculiar sort of seat in a choir-stall of a church; it has hinges at the back so that it can be lifted up and leant against the back; on the under side of the seat was fixed a bracket which formed a small seat on which aged priests and monks were allowed to rest when others were standing.

MISERICORDE. A room in a monastery* forming a second dining-hall. In this room it was permissible to eat meat, which was not allowed in the refectory.

MITRE. The line formed by the intersection of two similar surfaces or mouldings; e.g., by the mouldings at

* See article thereon.

the corner of an ordinary picture-frame. In joinery the joint generally coincides with the mitre and is called a mitre-joint; in masonry the joint cuts square across one set of mouldings, and the mitre is worked on the other piece.

MOAT. See CASTLE.

MODILLION. A bracket under the projecting part of a cornice. It commonly consists of two volutes curving in opposite directions and has an acanthus leaf under it (figs. 135, 136).



FIG. 135. CARVED MODILLION

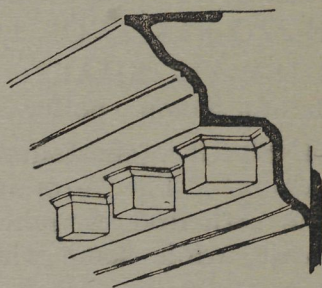


FIG. 136. PLAIN MODILLIONS

MODULE. The unit of measurement used in describing the classical orders; the module generally used is the diameter or semi-diameter (usually the latter) of the column at the bottom of the shaft.

MONASTERY (Lat. *monasterium*, a monastery, from Gk. *μοναστήρ*, dwelling alone). A house for members of one of the religious orders, Monks, Friars or Canons Regular.¹ It will perhaps be convenient to say a few words on these three classes of 'the religious' as they were called, before describing their houses.

Monks are members of a community which dwell apart from general society, as distinguished from Secular Canons, Canons Regular, Friars, and Hermits. In the Greek Church monks have continued to follow

¹ See Appendix.

the Rule of Basil the Great (329-79) without variation; monachism in the Latin Church, though based upon the Rule of St. Benedict (480-542), is very varied owing to the successive reformations of the Benedictines leading to the establishment of practically new orders. Moreover in England, Scotland and Ireland there existed, at the time of the landing of St. Augustine, monasteries not under the Rule of St. Benedict which had survived the Saxon invasion; these were, however, brought under obedience to Rome. The monks' life was to be one of seclusion, of prayer and study. Their houses, therefore, were built in lonely places. If the remains are now found in towns, it is these which have grown up round the monasteries. The canons regular, i.e. canons living under a Rule, held a position between the monks and the secular canons of the cathedrals, though approximating more nearly to the former. They are said to have been founded in the middle of the eleventh century, but their origin is acknowledged to be obscure. The institution of the friars formed a new departure. The monk had no personal possessions, but the community could hold property. With the friars there was neither individual nor collective ownership; they maintained themselves by begging. Their ideal, the reverse of that of the monk, was one of work among worldly men. The friary was therefore placed in the heart of the city. The monastery contained all the buildings necessary to the sedentary life, to a self-supporting community and a community which became very large landowners, while their church, however large, was practically the private chapel of the monastery. The friary gave bare accommodation to the brethren, while its church was essentially a preaching church. (*See Appendix.*)

Each of the religious orders developed a special arrangement of its buildings, to which every house

of the order adhered fairly closely. The plan of the church grew out of the common traditional plan, with variations to suit the views and ritual of each order; the arrangement of the secular buildings was dictated by the practical requirements of the Rule. The differences, whatever their origin, are in most cases confined to details. As the Benedictines were the first to develop a typical plan, and as their houses became more numerous in England than those of any other order, it will be convenient to describe the ordinary arrangement of one of these, and then to notice the points in which other orders departed from it.

The church* was generally cruciform, and in most of the larger examples the transepts, as well as the nave and presbytery, had aisles. In Norman times the east end terminated in an apse or in a group of apses, but towards the end of the twelfth century or early in the thirteenth century the presbytery was lengthened and the end made square. The presbytery generally occupied the eastern limb of the cross, the choir of the monks stretching across the transepts and about one-third of the way down the nave. It was separated by the pulpitum* from the rest of the nave, which formed the church of the novices and servants and of the general public, being entirely distinct from the choir, with separate entrances, altars and stalls.

The cloister and secular buildings were placed on the south side of the church for the sake of warmth, unless, as was often the case, some peculiarity of the site made it more convenient to put them on the north. Round the cloister were ranged the common buildings used daily by the monks, and beyond these lay various special buildings (fig. 137).

The cloister, which was the living-place of the monks, was at first covered by a simple lean-to roof, supported on stone or wood posts standing on a low

* See article thereon.

wall. Then a high wall with windows took the place of the posts, and the passages were often vaulted and covered with lead roofs. But the cloister long retained its character of a mere covered way with open sides. Gradually more shelter was obtained by glazing first the upper parts of the windows and then the whole. Often a series of little studies like sentry-boxes and not very much larger, called *carrells*,* were placed against the windows. Books were kept in an *armarium** or cupboard, or in later times in a library.*

In another part of the cloister, sometimes the west walk, the novices were taught. The stone bench which runs round the cloister is often marked with little sinkings about the size of the bowl of a salt-spoon in groups of nine. These were doubtless for playing some such game as 'Morris,' which still survives in our villages. There is another door into the church in the north-west angle of the cloister; it led into the part west of the pulpitum, and so would serve for novices and others who were not admitted to the choir.

In the east pane or walk of the cloister there is a series of doors leading into several buildings of importance. The first opens,—in many examples,—into a passage leading to the monks' cemetery. Next comes a large doorway with a window on each side: this is the entrance to the Chapter-house (fig. 138). The normal shape for the chapter-house was oblong, either square-ended or apsidal. The grand polygonal chapter-houses with which we are familiar were built chiefly in the thirteenth and fourteenth centuries, and for the most part by the secular canons; these and some few of the rectangular chapter-houses have vestibules, but usually there is none, and the entrance has not even a door.

Proceeding south, we come to the staircase which

* See article thereon.

goes up to the dormitory, and then to a series of small rooms under the dormitory, such as the Common-house or room in which great fires were kept burning in winter to which the monks were allowed occasionally to go to warm themselves, and a passage leading to

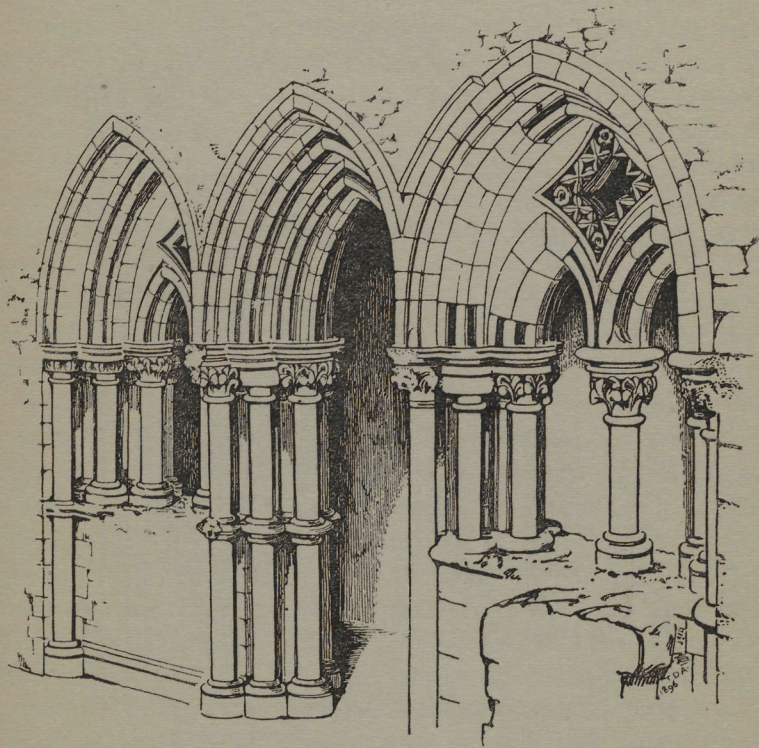


FIG. 138. ENTRANCE TO CHAPTER-HOUSE, ST. RADEGUND'S
CAMBRIDGE. *c.* 1180

the infirmary. Over the whole of this range is the Dormitory. From it another staircase, in addition to that from the cloister, descends direct into the transept, so that when the monks rose for matins at midnight they could enter the church and return without going out into the cloister. At the south end of the dormitory and on the same floor is a large

Necessary-house, containing a great number of closets divided by wood partitions; a stream of water was carried under it in an artificial cut.

To the south of the cloister stands the Refectory or Frater, the common dining-hall of the monks, entered

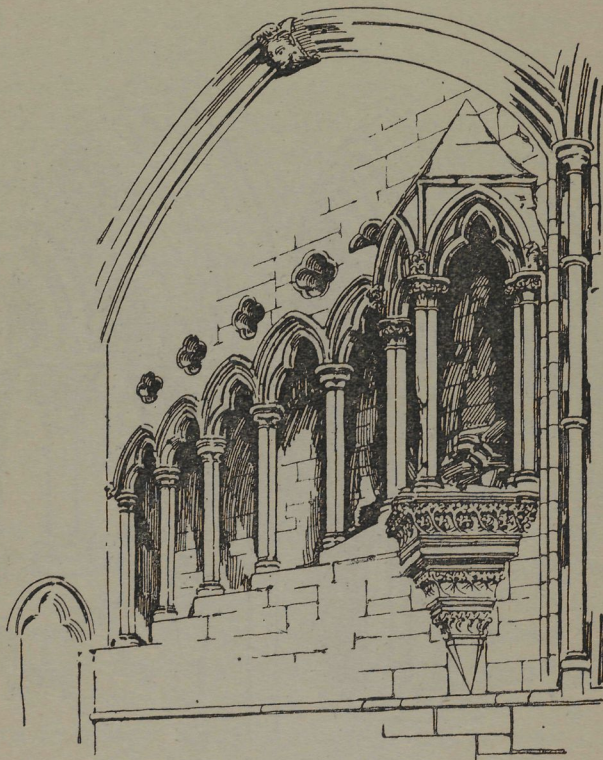


FIG. 139. REFECTORY LECTERN, CHESTER

by the doorway in the south-west angle of the cloister. It is usually on the ground floor, but is sometimes raised on vaulted cellars. Within the frater there is a lectern corbelled out from one of the side walls, from which one of the brethren read aloud while the others ate in silence (fig. 139). The Lavatory* is in the

* See article thereon.

cloister near the frater door. It consists of a long stone trough in a recess, and roller towels hung near by; there is a good example at Norwich. The Kitchen, in the greater houses at least, is often a large and lofty detached building at the west end of the frater; that at Durham is a well-known example. On the west side of the cloister there are usually the Guest Hall and cellars used for storage and other purposes. Here also is commonly a Parlour, where monks might see their friends or deal with traders, and also the Cellarer's Hall, where the ordinary guests were entertained. The almoner who dispensed broken victuals to the indigent had his quarters near the gate.

The most important of the outer ring of buildings is the Infirmary for the aged and the sick and infirm. Those who had recently been bled were also admitted in order to recover their strength. The building is usually to the east of the cloister, and connected with it by a covered way. It is planned like a church, with a very long nave and aisles and a chancel. The east part of the nave is cut off by a cross wall with a doorway. The part to the west of this wall is the infirmary proper, and the part to the east formed, with the chancel, a chapel. The aisles were in later times often cut up into a series of small rooms by blocking up the arches and building cross walls.

The Misericorde* was a hall which generally had some connection with the infirmary, but its position and name vary in different monasteries; it was provided for those who were allowed to eat meat, for meat might not be eaten in the frater, and hence occasionally the whole convent dined there. As time went on these occasions became more and more frequent, till at last the frater was deserted for almost the whole year.

* See article thereon.

The Cemetery of the monks was usually to the east of the church. It was distinct from that of the lay brothers and the public. Burials were sometimes made in the church, in the chapter-house, in the cloister; never in the cloister-garth.

Early in the tenth century an order of reformed Benedictines was founded at Cluny; hence they were called Cluniacs. They came to England in the second half of the eleventh century. They observed a very gorgeous ritual; their buildings were elaborately decorated but did not differ very materially from those of the Benedictines.

The Cistercian order, the second offshoot from the Benedictines, took its rise about 1100 at Citeaux (Latin, Cistercium). It came to England in 1128 and spread rapidly, especially in Yorkshire. In its architectural development it is one of the most interesting and important of the monastic orders. The Rule, which was drawn up chiefly, if not entirely, by an Englishman, Stephen Harding, was one of extreme severity. Houses were to be planted in wild and desolate places. Manual work, as well as devotion and study, was required of the brethren; each establishment was to be self-supporting, was to produce all that it required. It is due to this cause that towns did not grow up round their monasteries, as they did round those of the Benedictines such as Bury. Absolute simplicity was to be observed both in ritual and in architecture. There was to be but one tower, central and low, no unnecessary turrets or pinnacles, no triforium, no pictures on walls or in glass, crosses were to be of wood and candlesticks of iron. From these causes Cistercian houses differ both in their architectural character and in the number and disposition of their buildings from those of the Benedictines (fig. 140).

The Church has a very short eastern limb (until

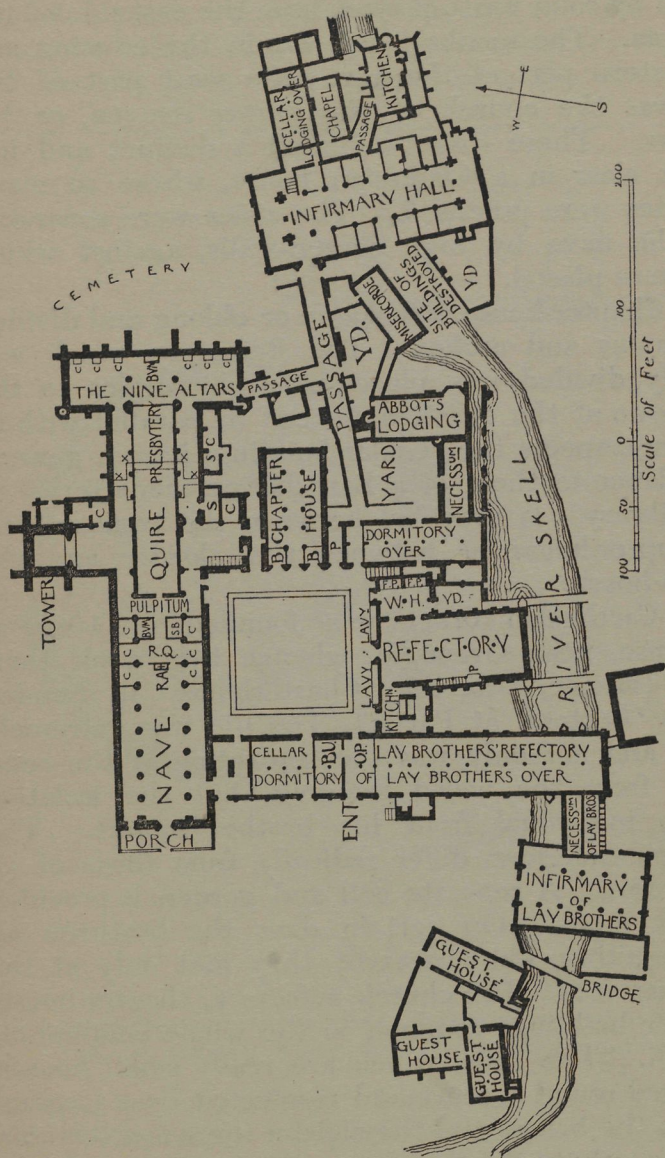


FIG. 140. CISTERCIAN PLAN, FONTAINE ABBEY
(See List of Illustrations)

lengthened in later times) with a square end. Chapels, divided by solid walls, project from the east side of the transepts. The monks' choir was in the crossing and the eastern part of the nave; the west part of the nave was the church of the *fratres conversi*, or lay brothers. These *conversi* formed a distinct and important class in a Cistercian house, where so many industries were practised. The aisles were separated from the nave by high screen-walls, against which stalls were placed.

The Chapter-house was square or oblong and divided by columns and arches. The Refectory which was similarly divided was placed at right angles to the south pane of the cloisters, instead of parallel with it. In other respects the secular buildings have a general resemblance to those of a Benedictine monastery. A small library* is provided between the transept and the chapter-house or between the cloister and the chapter-house.

The Carthusian order was founded in 1086 at Chartreuse, near Grenoble, whence they took their name. (Hence, also, the 'Charterhouse' in London and the 'Certosa' at Pavia.) The life was extremely ascetic, and not only was the separation of the community from the world required, but the isolation of each individual from his brother monks. The buildings, therefore, differ radically from those of all other orders. A separate cell and garden is provided for each monk. On certain days the brethren all dined together, but ordinarily they met only at the church services. The church, refectory, chapter-house, and other buildings common to the whole community are small. The cells, which are really small houses, are ranged round a court and connected by a cloister. Between the houses and the cloister there is a corridor, accessible only to the Superior. Food was passed into

* See article thereon.

each house through a hatch so contrived that the occupant could not see out through it. The house contains a living-room, a bedroom, a closet for keeping fuel (for the room was warmed by a fire in winter),

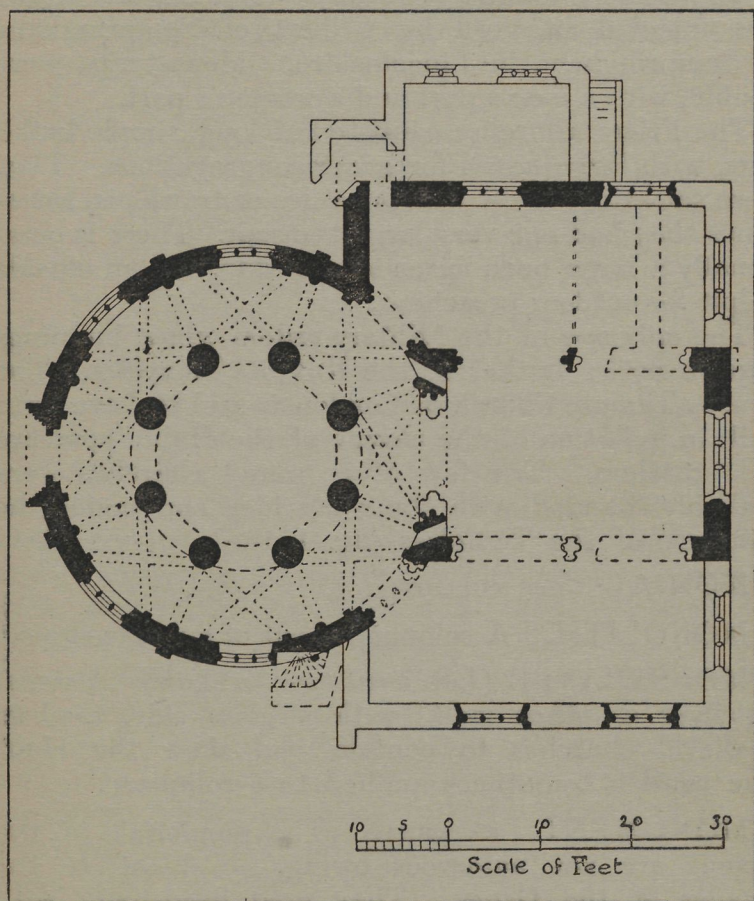


FIG. 141. CHURCH OF THE HOLY SEPULCHRE, CAMBRIDGE

and there was a garden in which the occupant might work. The order was introduced into England by King Henry II. The best-preserved buildings are those of Mount Grace, Yorkshire, founded about 1397.

After the Benedictines the most numerous were the Augustinians, an order of Canons living under rule. Their houses do not differ greatly from those of the Benedictines.

The Gilbertine order, the only one of English origin, was founded in 1148 by Gilbert of Sempringham, at Sempringham, in Lincolnshire. Monasteries were double, with a men's part and a women's part.

The Friars' churches consisted of long, simple buildings, with large naves for great congregations. They were sometimes built without aisles or transepts, sometimes they had one very large transept. There is occasionally a large open space on one side, and an outside pulpit for outdoor preaching.

The only one of the Military orders whose buildings require notice is that of the Knights Templars. The famous Temple Church in London is said to have been built in imitation of the church of the Holy Sepulchre at Jerusalem. The few other round churches were probably founded with the same idea and under the influence of the Templars (fig. 141).

MONIAL. *See* MULLION.

MONOLITH. A column cut out of a single stone.

MONSTRANCE (Lat. *monstrare*, to show). A vessel of silver or other metal with a glass side, used in medieval churches to contain and show the Host. The word is sometimes applied to a reliquary.*

MONUMENT. EXTERNAL. The memorials of the Saxons are not numerous owing, no doubt, to the ravages of the Danes. They used headstones with crosses and interlacing wicker-work pattern carved in low relief (fig. 142); some of their sculptured stones appear to be coffin-lids. The Danes themselves have left a number of stones carved with crosses

* See article thereon.

and bearing inscriptions in Runic characters cut on the angle (BL.).

After the Norman Conquest both the recumbent slab and the upright headstone were used, sometimes both together, the foot of the headstone being fitted into a notch in the slab, and sometimes there was a

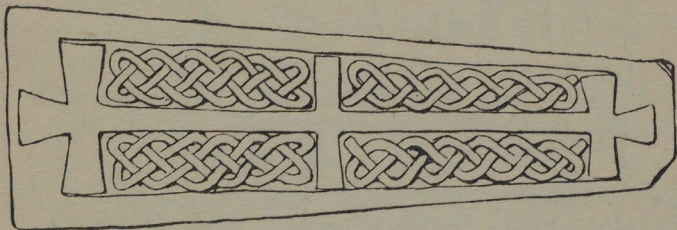


FIG. 142. GRAVESTONE, LITTLE SHELFORD

cross at the foot as well as at the head. Probably the graves of the poor had wooden crosses only. The headstones seem generally to have had circular heads carved with more or less ornamented crosses. The slabs, which taper like coffin-lids, were, no doubt, generally merely coverings of graves, for burial in a coffin was exceptional (BL.). The slabs are carved with a cross in low relief (fig. 143); those of the thirteenth century are often sloped down on each side from a central ridge like a roof (fig. 68), and they are then described as 'coped,' i.e. worked like the coping* of a wall. More rarely the stone was carved with an effigy, in low relief during the twelfth century but becoming bolder or being fully in the round in the thirteenth. Sometimes the device is done in incised lines filled with black composition, and the profession or trade of the person commemorated is indicated by a symbol, as a priest by a chalice, a mason by a pair of compasses. Very rarely is there any inscription, and it is not improbable that they were ready-made things kept in stock (BL.). The crosses on the recumbent

* See article thereon.

slabs of the thirteenth century usually have circular heads (fig. 68); there is a peculiar scroll design issuing from about the middle of the shaft, which may perhaps represent the cords by which a processional cross was

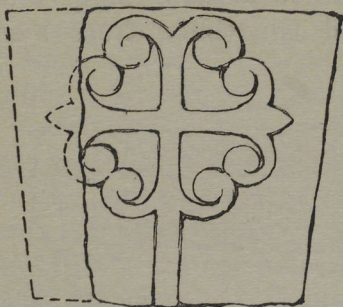


FIG. 143. CROSS, LITTLE SHELFORD

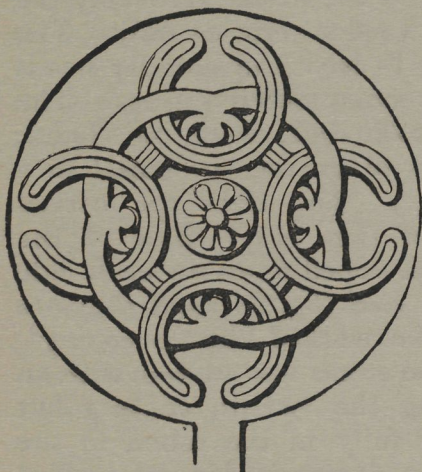


FIG. 144. CROSS, RHUDDLAN

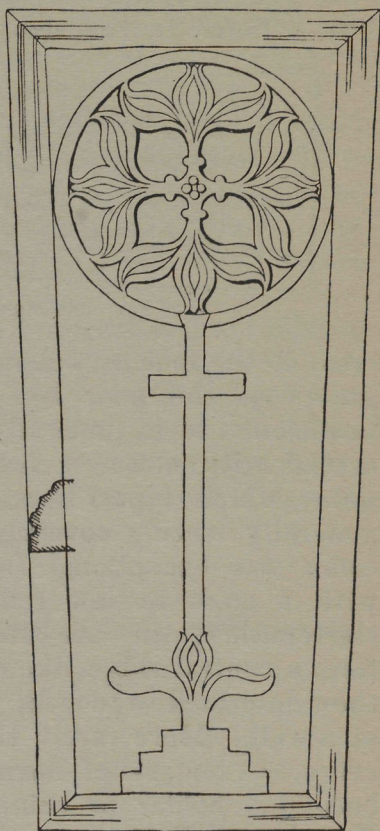


FIG. 145. GRAVE-SLAB, RHUDDLAN

steadied while being carried (fig. 265). The slabs of the fourteenth century are more usually flat, they taper towards the foot like those of the thirteenth century. The cross is foliated and there are no scrolls (fig. 145). The slabs of the fifteenth century are rectangular, (BL.) being as wide at the foot as at the head. The head-

stone, in the few examples remaining, is an actual cross, not a cross carved on a circle; it is decorated with cusps and with the other ornaments commonly used at the time.

It is generally difficult to say whether these slabs were originally in the church or churchyard. Probably almost all were in the churchyard. Burial in the church became more common as time advanced, but in early days it was rare.

Built-up churchyard monuments covered by a slab were used in the fourteenth century, but they appear to have been low—hardly so high as the knee. But in the fifteenth century they were made as high as a table; they were formerly called ‘high tombs,’ and are now commonly spoken of as ‘altar tombs’ from their resemblance to stone altars. The slab seems generally to have been plain, the sides are ornamented with traceried panels and there is often, towards the end of the century and in the first half of the sixteenth century, a short inscription, such as “Here lieth Thomas Brond whos soule God Pardon.”

Churchyard monuments of the period from the Reformation to the Restoration are rare. Crosses of any kind were disallowed during a great part of the time, though as a matter of fact they were put up. Some high tombs of a plain character were built.

After the Restoration, besides the high tombs of the well-to-do, there were two common forms used by the poorer folk: the straight-sided headstone with the top cut into an ornamental profile and the upper part of the face above the inscription carved with cherubs’ heads and flowers; and the long plain board supported on two posts at the head and foot of the grave. Though both kinds are devoid of any Christian symbolism and their uncouth rhymes have become proverbial, these humble memorials are in their way well designed and are infinitely superior to the productions which

have followed upon the 'revival of taste' in the nineteenth century.

INTERNAL MONUMENTS. We now come to the consideration of monuments within the church.

The earliest memorials are the flat slabs which formed part of the pavement of the church. A cross was carved or incised upon them, or they were sculptured with an effigy in low relief like the monuments of the churchyard. Effigies in high relief or completely in the round must generally have been in an arched recess in the wall; the arch is generally low in the thirteenth century and the slab raised but slightly above the floor. This type of monument increased in magnificence in the fourteenth century; the arch was made more lofty and its ogee hood-mould, pinnacles and heraldry occupy the wall space above; the tomb itself is raised to the height of an altar and is frequently made wide enough to receive the effigies of both man and wife; its front is decorated with little niches containing statuettes. The slab at this stage is seldom carved in relief. It is sometimes plain, but generally has an effigy in the round or a brass. In cathedrals and large churches these tombs are often placed under one of the arches between the choir and aisle or between the nave and aisle, so that they can be seen from both sides. The canopy is in these cases of every degree of elaboration, from the flat wooden ceiling over the tomb of the Black Prince at Canterbury to the rich stone arch of the Valance tomb at Westminster. The idea of this type "was doubtless taken from the hearse [i.e. the canopy] and the lights which covered the coffin when the funeral service was performed. Thus first we see a basement with little figures of the relatives as mourners; on the top of this is the recumbent effigy of the deceased, with angels at the head and an animal at the feet, while over all is a lofty pedimented stone canopy supported by

columns and buttresses rising from the angles of the basement" (BU.). In some of the great monuments of this class made in the fifteenth century the space covered by the canopy includes a chantry chapel; the tomb is placed at the west end of the space, leaving at the east end just sufficient room for a small altar and for a celebrant.

The favourite position for a tomb was on the north side of the choir. This position may have been chosen in order that the tomb might be used as an Easter Sepulchre, which was on the north side.

The great shrines* of the patron saints of some of our abbey churches occupied a central position immediately behind the high altar. The tomb of Edward the Confessor, built by Henry III., in Westminster Abbey, is almost the only example remaining, though the exact positions in which others formerly stood is well known, and the worn pavement still bears witness to the stream of pilgrims who came

The holy blisful martir for to seke,
That hem hath holpen, whan that they were seke.

A shrine of this class consisted of at least four distinct parts: (*a*) the stone or marble basement; (*b*) the altar at one end of it; (*c*) the feretory, that is the actual shrine or wooden coffin; (*d*) the cover of the feretory, a wooden framework hung from the vaulting above and raised by means of a counterpoise (BU.). The feretory was covered with gold and silver plates and decorated in various ways. The fourteenth-century basement of the supposed shrine of St. Etheldreda at Ely is a vaulted space open at the sides; at Westminster it is solid, but the north and south sides are pierced with three niches each; "it was in these that sick people were frequently left during the night, in the hopes of a cure being effected by the intercession of the Saint" (BU.).

* See article thereon.

Some of these high shrines had near-by a chamber provided for a special watcher; there is an example at St. Albans.

The treatment of effigies varies at different periods. Some, especially in early times, are inappropriately treated as though they had been standing in a niche, and as if figure and niche together had been laid down. They sometimes have also at the head two figures of angels, or these only without the niche, kneeling or flying down or bearing away the soul—the most beautiful treatment which this part of the tomb receives. Generally the head rests on a pillow or on a tilting-helmet. The hands are raised or joined in prayer, or occasionally in late figures are parted as if meant to suggest ecstasy. In the twelfth and thirteenth centuries the figures of knights have the legs crossed—a conventional attitude having no reference to crusades as is sometimes supposed.

The figures are generally cut in stone, but some of the early examples are of Purbeck marble. Some of the greatest, such as those of Henry III. and Queen Eleanor, the wife of Edward I. (superb works by the Englishman William Torel), were cast in bronze and gilt. The figure of William de Valence (1296) is of oak covered with thin plates of copper, engraved and enamelled—a work probably of Limoges, for “the artistic execution of the figure is very much worse than would have been the case in England in 1296” (BU.). The effigy of Henry V. was of oak overlaid with silver. There are some few effigies remaining of plain oak; it is said that after 1280 they were as common as stone, but that their use was discontinued about fifty years later (PR.). In late medieval times alabaster was much used. It was frequently, perhaps generally, covered with a thin coat of *gesso** and painted. Important tombs were protected by strong ironwork.

* See article thereon.

In the reigns of Elizabeth and James I. several new types of monument were used.

The canopied tomb is no doubt a development of the medieval tomb, but instead of being placed under an arch it stands clear in a transept or chapel. The tomb resembles the medieval tomb and bears a recumbent effigy. The side is carved with small figures in relief, not placed in niches as formerly, but kneeling in two files facing one another, boys on one side and girls on the other: they are the children of the deceased. There are a few weeping cherubim. The canopy is a classical entablature supported on four columns, and surmounted by pediment-like arrangements of strap-ornament* with great displays of heraldry.

A class of monument holding a half-way position between these and the mural monuments is the monument of rather large dimensions containing a full-sized sarcophagus or a life-size figure, but placed high up on the wall, half recessed and half projecting on corbels.

The mural monument was perhaps suggested partly by the medieval niche, and partly by the mural brasses contained in little flat canopied slabs, which had come into fashion in the fifteenth century. (*See BRASSES below.*) They generally consist of a round-arched recess, containing a kneeling figure or a bust, and surrounded by a classical composition; these are often of a modest and satisfactory design.

The best Elizabethan figures retain the medieval feeling, and are dignified; but some are placed in a would-be easy attitude, resting the head on the hand, as if suffering, as contemporary writers satirically suggest, from a tooth-ache. Lord Bacon sits in his chair above the altar with his hat on.

A great variety of material was used. Parts of the tomb, the figure and the entablature, were commonly

* See article thereon.

of plain marble or alabaster, the top of the tomb of black touchstone, the columns of richly-coloured marbles with white capitals; and coloured marble panels and friezes were inserted. The effigies were generally painted. The larger monuments were railed round.

After the time of James I. the great tomb became less common. The canopy and architecture generally were gradually abandoned and the composition became more and more an affair of sculpture. There is the greatest diversity of idea and arrangement; the most common variety consists of a representation of a marble sarcophagus, and above it a group of allegorical and other figures, such as Fame crowning the departed with a laurel wreath; the background to the figures is usually a large plain slab of marble.

At the same time the mural monument became more common; it was also smaller and simpler. The elaborate architecture with the deep recess was abandoned for a flat treatment more appropriate to the position. The later mural monuments are usually devoid of sculpture except perhaps for a portrait medallion. There is a coat-of-arms under a simple pediment, and a long inscription. The last form that need be noticed is the white marble coffer or urn on a black slab.

The medieval custom of placing over the tomb of a man his helmet, shield, sword and gauntlets was continued till comparatively late times, and the trophies retained something of their medieval form. The painted heraldic achievements which we call hatchments are also a survival of medieval use.

BRASSES. The great authority on this subject considers that monumental brasses were derived from two older forms of monument, namely: (*a*) Incised stone slabs; (*b*) Limoges enamels (HA.). Of incised slabs there are few examples in this country; they were probably from the first more common on the Continent, and certainly

were so in the fourteenth and fifteenth centuries, when they were still as much used as brasses. The design whether a figure or a cross was cut into the stone and the incision filled with lead or some composition. The resemblance between the two forms of memorial is obvious, and they would clearly require no very great difference in general design or treatment of detail. The change of material was due to the enamellers. The art of enamelling was introduced from Byzantium into France and Western Europe in the twelfth century, and it was applied to the memorials of the dead by the craftsmen of Limoges. The whole surface of the copper-plate was covered with enamel. The design consisted of a figure on a diapered ground, under a niche, and with an inscription. These works of art were necessarily small on account of their costliness. After a while the effigy is left as a plain metal surface surrounded by an enamelled ground. The details of the costume, and to a slight extent the modelling of the figure and folds of the drapery, were indicated by engraved lines, as had been done in the incised stone slabs, and the lines were filled with enamel. Till the end of the middle ages enamel continued to be used very commonly in the heraldic bearings and some other parts. Work of this class may be described as parcel-enamel. In the next stage the enamelled background is omitted, and finally the brass plate is cut to the outline of the figure and let into a corresponding sinking in the stone (MA.).

The material used for brasses was a mixture of copper and zinc called laton or latten,* prepared chiefly at Cologne. Most English brasses were engraved at Isleworth, near London, but there were also some provincial manufactories (MA.). A few particularly magnificent examples are entirely the work of foreigners and are known as 'Flemish brasses.' The

* See article thereon.

matrix or stone into which the plate is sunk is almost invariably Purbeck marble.

The most usual position for brasses is the floor, but they are also, after the fourteenth century, placed on the slabs of altar-tombs and occasionally on the walls.

The art was probably introduced into England in the first half of the thirteenth century, but the earliest example remaining is dated 1277. The works done in the reigns of the two first Edwards are of greater artistic and technical excellence than any of a later time; the figures are life-size and boldly drawn with deeply incised lines. The inscription runs round the margin of the slab and the letters are commonly each cut on a separate piece of metal (MA.). Canopies inappropriate to a recumbent figure were introduced in the reign of Edward II. In the two following reigns brasses became more varied and magnificent, and all classes are represented instead of only great personages and their wives as formerly. The figures are now of all sizes, but are usually about four feet high. The drawing is rather more conventional than formerly but is nevertheless of great beauty (MA.). The border inscription is always on a continuous strip of metal and a second inscription is placed below the figure. Floriated crosses are used sometimes instead of effigies, and some of them have quatrefoil heads enclosing whole or half figures. "Bracket brasses appear at the same time, in which the figures are represented upon a canopied bracket, or sometimes kneeling at its foot, and supplicating certain saints above" (MA.). These were discontinued in the first half of the fifteenth century, and in figure brasses the figures are smaller.

The decline in the art begins to be more evident in the third quarter of the fifteenth century. The simple recumbent attitudes of the early brasses with the hands raised in prayer are abandoned and the figures

are often represented in half-profile with the hands apart and standing on grassy ground. Shading begins to take the place of the earlier flat and more suitable treatment. Brasses representing shrouded skeletons become common especially in the eastern counties. These faults are much more conspicuous in the last quarter of the fifteenth century and in the first half of the sixteenth; the drawing is often bad and the treatment is pictorial; the figures are represented kneeling at desks. Mural brasses become common. The art continued to decline till its practice was abandoned in the time of Charles I. (MA.).

MORTICE OR MORTISE. A hole cut in a piece of wood to receive the end, called a tenon,* of another piece.

MOSAIC (Gk. *μουσαῖος*, belonging to the Muses, artistic—s). A surface formed of small pieces of stone, marble, tile or glass, used on walls, vaults, floors and columns. Much employed by the ancients and in the early Christian churches in Italy and in the East. It was used by the Romans in Britain for their floors and probably also for walls and vaults. The art was never practised by the English; all the work in Westminster Abbey, namely the shrine of Edward the Confessor, the pavement round it, the tomb of Henry III., and the pavement in front of the altar, was done by Italians. These works date from the latter half of the thirteenth century, and are the only or almost the only medieval examples in England.

MOULDING. A concave or convex surface forming a groove or staff, or a combination of the two, of uniform profile at all points throughout its length, sunk in or projecting from the face or edge of some part of a building or piece of furniture.

* See article thereon.

An individual and definite part of a moulding or a single moulding in a series is called a member. A carved or painted ornament repeated at regular intervals on a moulding is called an enrichment.* A plain or slightly concave surface cutting off an edge is called a chamfer.*

In Gothic architecture the art of moulding steadily develops by a series of slight changes. It is used principally for capitals and bases, string courses and plinths, mullions and tracery, and particularly for arches. In Renaissance architecture, as in its parent Roman, the arch is scarcely moulded at all, nor is the string course and plinth, but the cornice is elaborately moulded. In short each style employed mouldings to emphasise and ornament the feature which was its special characteristic—in Gothic the arch,* in Classic the entablature.* In any style the positions in which mouldings are used, the general arrangement of a group, and the plane on which it is worked, is of as great or greater importance than the form of the individual mouldings.

Saxon work shows the influence of Roman architecture in nothing more plainly than in its mouldings. Those of the arch, which is of one order* only, are few, simple and shallow; they are worked on the face, the soffit being plain, and they spring often from an impost which is a rude copy of the entablature.

The half-way position which Romanesque holds between Roman and Gothic is illustrated by its treatment of the arch. Like Gothic and unlike Roman work it is of many orders and is elaborately ornamented, but the ornaments, though much corrupted, are borrowed indirectly from the Roman entablature and consist of enrichments rather than mouldings (fig. 192). Norman mouldings were in fact very few and very simple. They consist of a hollow chamfer under the hood-mould

* See article thereon.

(fig. 146) and a bowtel on the edge of the outer order with a shallow hollow on the face, while the inner order is often plain (fig. 147). Thus the arrangement of recessed orders is well preserved.



FIG. 146.
NORMAN ARCH-MOULD

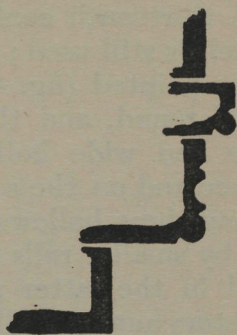


FIG. 147.
NORMAN ARCH-MOULD

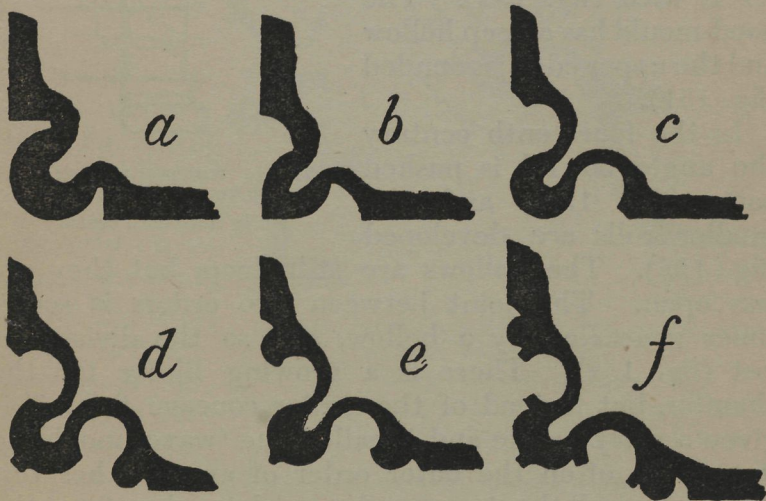


FIG. 148. THE BOWTEL

It is this recessed arrangement rather than the shape of the individual members which distinguishes early work from late. As the mouldings are elaborated the

separation between the orders is lost, and the edges of the orders become rounded off till the face of the arch gradually becomes a wide splay instead of a series of recesses (fig. 155 *c, d*).

In the thirteenth century the bowtel* is still used; it is sometimes pointed (fig. 149) instead of round, and there are deep and wide hollows on the face and on the soffit. Before long these hollows are followed by smaller rolls (fig. 150), and in the latter part of the century numerous fillets are added (fig. 148 *f*). In plain work the hollow chamfer is used (fig. 153). The hood-mould has a deep hollow and the upper edge is rounded (fig. 151).

In the fourteenth century the angle bowtel is pushed back (fig. 154), and the smaller rolls are developed (fig. 152). The hollows are still deep, but they are less open. The joint between two orders is sometimes concealed by a hollow, and so the division is lost (fig. 152). There is a growing liking for the chamfer, but instead of the earlier concave form it is given a wavy profile and is called the 'wave' moulding (fig. 156); often the outer order of an arch has this moulding and the inner order a plain chamfer; the 'sunk chamfer' is also used. The hood-mould loses its hollow (fig. 157).

The wave moulding changes: it is smaller, and the

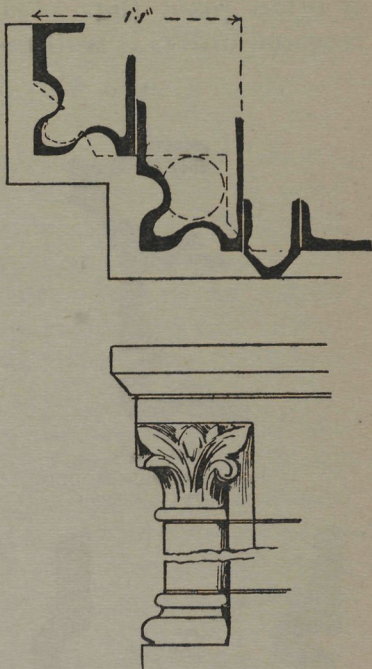


FIG. 149. POINTED BOWTEL AND
PLAIN HOOD-MOULD
Early thirteenth century

* See article thereon.

convex part is reduced, so that it becomes what is known as the 'ogee,' which is one of the most characteristic mouldings of the fifteenth century (fig. 160); this is sometimes followed by a fillet and hollow, sometimes

by the same moulding reversed, forming a 'double ogee.' The hollows are contracted, or else they are made extremely shallow and open and are called 'casements' (fig. 161). The hood-mould most often has a sloping or wavy top and a hollow or an 'ogee' underneath (fig. 160). The mouldings are now worked so exactly on a splayed face that they all die into a plain splayed jamb or pier (fig. 159). They are often, however,

continued down to the floor, or the hood-mould or other single member springs from a tiny shaft and capital.

The general character of other mouldings agrees with that of the arch mould. Thus the abacus* of the capital* (fig. 162), the annulet* (except in Norman

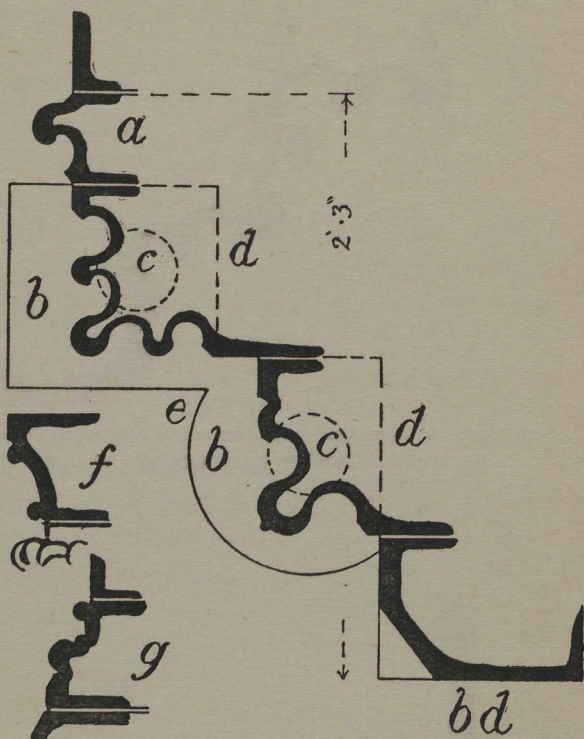


FIG. 150. MOULDINGS ON RECESSED ORDERS AND WITH WIDE HOLLOW

Early thirteenth century

a, hood-mould; *b*, arch-mould; *c*, shaft; *d*, jamb;
e, plan of abacus; *f*, section of abacus; *g*, base

* See article thereon.

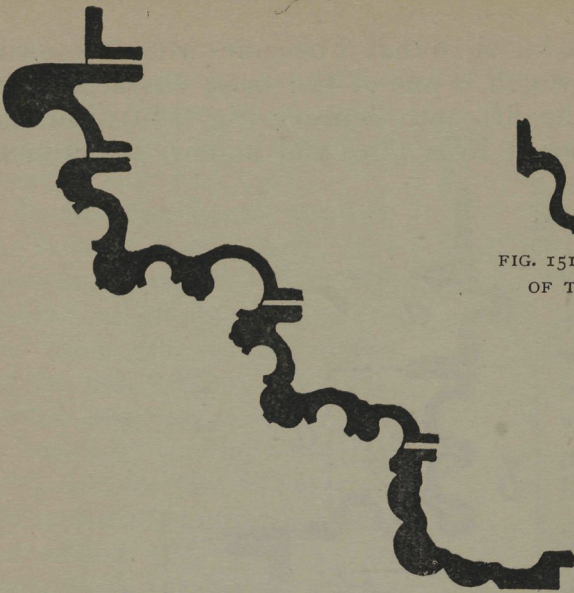


FIG. 151. BOLD MOULDINGS
OF THE THIRTEENTH
CENTURY

FIG. 152. ELABORATE MOULDINGS OF THE FOURTEENTH
CENTURY. LOSS OF THE RECESSED ORDERS

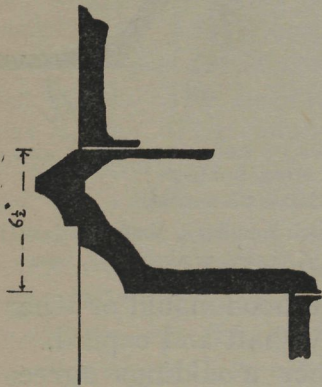


FIG. 153. THE HOLLOW CHAMFER.
ARCH AND HOOD OF A RECESS
ON ONE STONE.

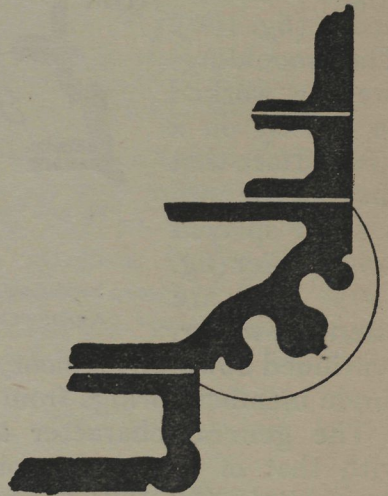


FIG. 154. THE BOWTEL PUSHED BACK
Fourteenth century

times) and the string course* (fig. 163) are at all periods very similar to the hood-mould.

The base* in Norman times is poorly moulded (figs. 20, 164), but it gradually develops (figs. 165, 149, 150), and in the thirteenth century it has two rolls with a deep hollow between (fig. 169), and has a resemblance to the Attic* base (fig. 17a) only it is much wider and shallower. The hollow is lost at about the same time—the end of the thirteenth century—as the hollow in the hood-mould and abacus (figs. 167, 22). In the fifteenth century the base is drawn out into a series of small mouldings, high but of slight projection (figs. 168, 23).

The curious idea of ornamenting the capital with a series of horizontal rings was developed in the twelfth and thirteenth centuries (fig. 44).

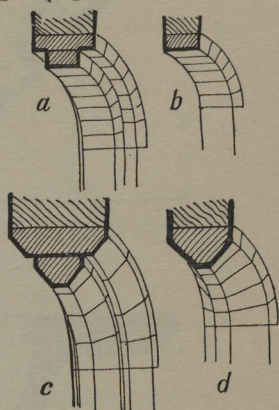


FIG. 155. DIAGRAM OF ARCHES WITH SQUARE EDGES AND SPLAYED FACES

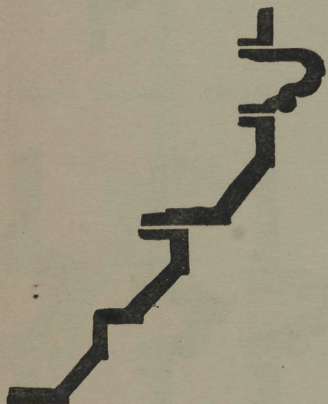


FIG. 157. THE SUNK CHAMFER
Fourteenth century

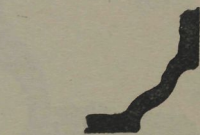


FIG. 156. WAVE MOULDING

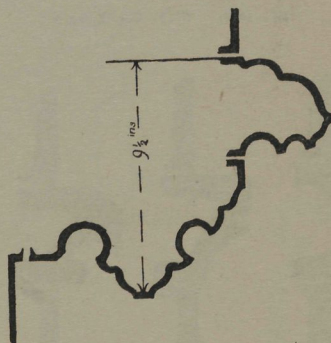


FIG. 158. MOULDING OF SMALL ARCH
Fourteenth century

* See article thereon.

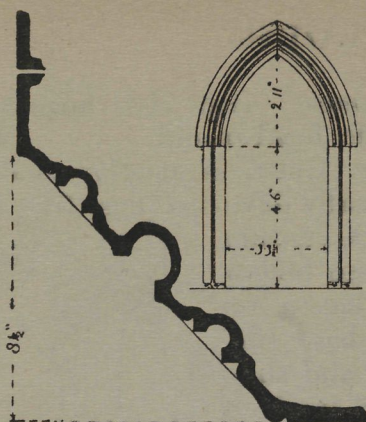


FIG. 159. Fourteenth century



FIG. 160. Fifteenth century

MOULDINGS ON THE SPLAYED FACE

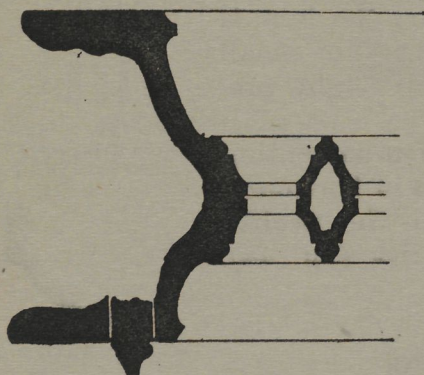


FIG. 161. THE CASEMENT.

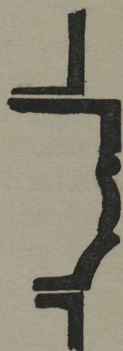


FIG. 162. NORMAN ABACUS

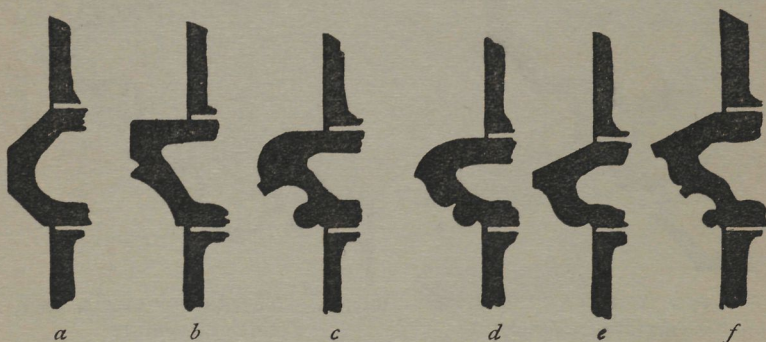


FIG. 163. STRING COURSES

a, b, Norman ; *c*, thirteenth century ; *d*, fourteenth century
e, f, fifteenth century



FIG. 164.
NORMAN BASE
MOULDING



FIG. 165.
TRANSITIONAL BASE
MOULDING

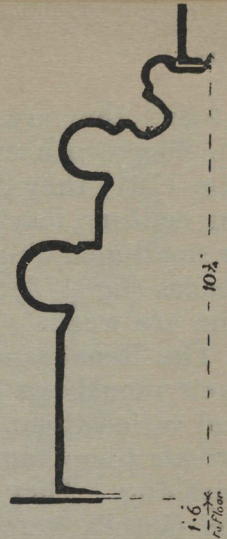


FIG. 166. BASE
Thirteenth century

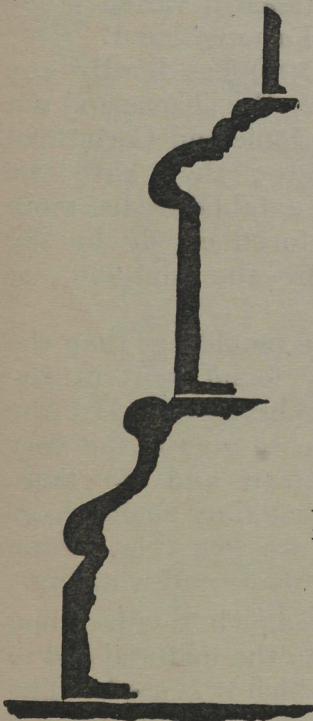


FIG. 167. BASE
Fourteenth century

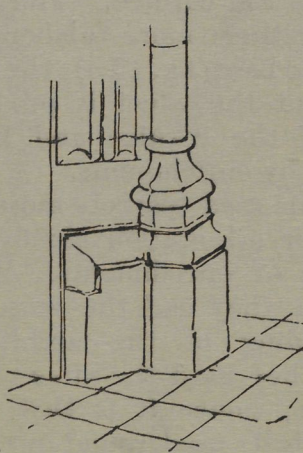


FIG. 168. BASE
Fifteenth century



FIG. 169
CAPITAL AND BASE
Thirteenth century

At first they are simply treated (figs. 169, 170), but in the fourteenth century they are often over-elaborated (fig. 172); they dwindle again, however, in the following century, leaving little or nothing but the 'necking' or small moulding at the bottom of the capital and the abacus (fig. 173); the mouldings and the general outline are weak.

The Renaissance architects followed the Romans in their mouldings though they sometimes refined them and varied them. The Romans had betrayed their in-artistic temperament in their mouldings as much as in anything. They were as coarse and clumsy as those of the Greeks were subtle and refined (fig. 180). Both peoples made less use of mouldings than the medieval builders. The individual mouldings were not so numerous nor were the combinations so varied; they followed more closely a traditional arrangement.

The Greek Doric order (fig. 192) has hardly any mouldings: a single member under the abacus and not much more on the cornice. The Ionic and Corinthian orders are rather more elaborate; they have the beautiful Attic base (fig. 17 *a*); the entablature has more mouldings, but the effect is produced chiefly by the projection of the cornice and by the mutules* or brackets and by enrichments.

The Romans used scarcely more mouldings than the Greeks; their ostentation chiefly found vent in the excessive use of enrichments. When they used the arch, however, they had the sense to give it the very simple moulding of the architrave and no more (fig. 181). They used the same moulding round doors and windows; hence it is that we get this section almost universally used round our doors and windows.

MOULDINGS IN WOOD are always much smaller than those of stone, as is only suitable to the material and to the character of the objects for which it is used. The chief examples of the middle ages are those on the



FIG. 170. CAPITAL
Late thirteenth century

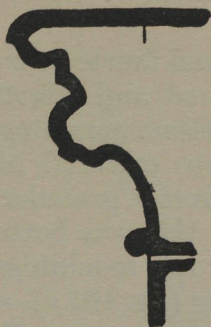


FIG. 171. CAPITAL
Fourteenth century

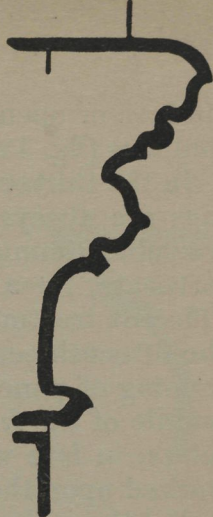


FIG. 172. CAPITAL
Fourteenth century

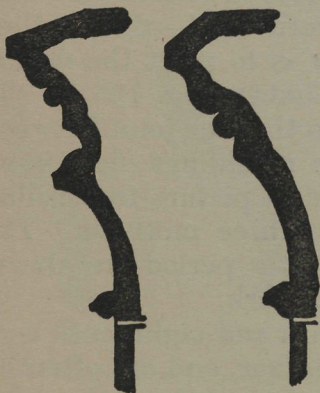


FIG. 173. CAPITALS
Fifteenth century

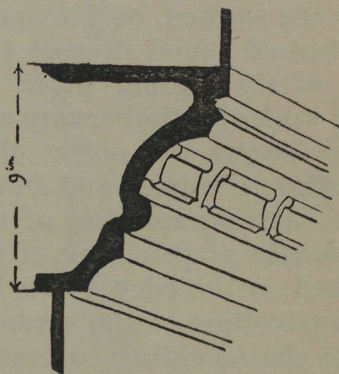


FIG. 174. INTERNAL WOOD CORNICE

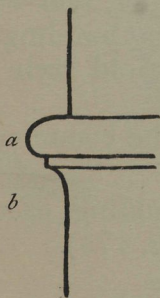


FIG. 175. ASTRAGAL (*a*) AND APOPHYGE (*b*)



FIG. 176. BEAD

timbers of open roofs (fig. 174), on church screens and mullions (fig. 187).

In the thirteenth and fourteenth centuries the mouldings are always refined and effective, but they often resemble diminutive stone mouldings. This is not quite fortunate, for a fibrous material like wood demands a different treatment from a granular one like stone. In the fifteenth century this was better understood. The framing of panelling has mouldings running down the middle of the framing (fig. 195 *a*), and the panels themselves, in late work, have a peculiar sort of moulding worked upon them called the linen* pattern.

Till the end of the sixteenth century all wood mouldings were 'stopped,'—that is, they are finished off in some way near the end of the piece of timber on which they are worked, or they are 'returned,'—that is, they are turned round in such a way as to meet the mouldings of some other piece of timber (fig. 195 *b*). In later work the timbers are cut so that the joint between them follows the mitre* of the mouldings (fig. 195 *c*). An 'Oxford frame' and an ordinary picture-frame illustrate the first and last of these three methods. The mouldings of panelling of the later period are always worked on the edge of the framework.

In panelling of the seventeenth and eighteenth centuries the mouldings are much larger, and are often on a separate piece of wood, which is nailed on the edge of the framework. In that case they are made to project beyond the face of the panelling, and are called 'bolection'* mouldings. But in many buildings till the end of the seventeenth century the old style of small stopped mouldings is used.

The following are the names of the commonest Classical and Renaissance mouldings:—

ASTRAGAL. A small convex moulding used at the bottom of the Corinthian capital (fig. 175).

* See article thereon.

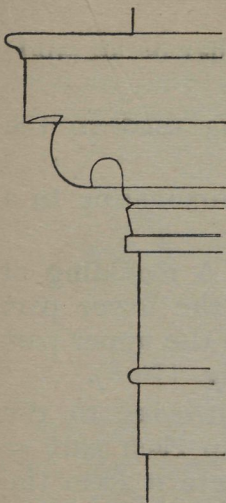


FIG. 177. BIRD'S BEAK



FIG. 178. CAVETTO

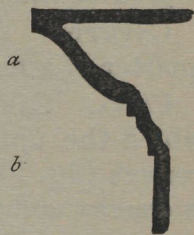


FIG. 179. CYMA
a, Cyma recta
b, Cyma reversa

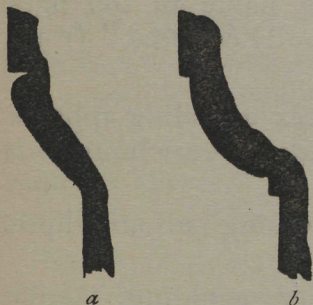


FIG. 180. OVOLO
a, Greek
b, Roman

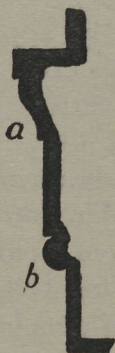


FIG. 181.
ARCHITRAVE
MOULDING

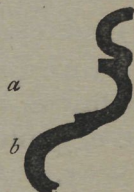


FIG. 182.
a, Scotia
b, Torus



FIG. 183. OGEE



FIG. 184. QUIRK
a, Simple ogee
b, Quirked ogee



FIG. 185. REEDING

BEAD. A small circular moulding either on an angle or flush with a surface (fig. 176).

BIRD'S BEAK.—An undercut moulding used on the capital of the Greek anta (fig. 177).

CAVETTO. A concave moulding approximating to a quarter of a circle (fig. 178).

CYMA. Called also the *cyma recta*. A moulding of which the upper part is concave and the lower part convex (fig. 179 *a*). In the *cyma reversa* the upper part is convex and the lower part concave (fig. 179 *b*).

CYMATIUM. "A name given by Vitruvius to the groups of mouldings which serve to cap each part or subdivision of the entablature, or separate it from the next. The name has no reference to the form or number of the mouldings. . . . But another set of writers . . . have strangely applied the name to the ogee moulding,* and this error is generally adopted" (P.).

ECHINUS. See **OVOLO**.

OVOLO (*ovum*, an egg). A convex moulding approximating to the quadrant of a circle; its enrichment* is the egg and dart (fig. 180).

SCOTIA. A concave moulding, forming half an ellipse, in the Attic base (fig. 182).

TORUS. A semi-circular convex moulding, similar to the astragal but larger (fig. 182).

(See also **ABACUS**, **APOPHYGE**, **BED-MOULDING**, **CORONA**.)

MULLION OR **MONIAL**. A vertical division in a window.* In England it is generally of stone or wood, according to the character of the building, but occasionally of brick. It originated in the gradual reduction of the pier between two coupled lancets. (See **TRACERY**.) In Gothic stonework the edges have a wide hollow chamfer,* with either a plain fillet or a moulding on the outer and inner faces (fig. 186 *a*); in woodwork

* See article thereon.

they are sometimes entirely moulded (fig. 187). Tudor mullions have convex mouldings (fig. 186 *b*). In pure Renaissance work the mullion is not used.

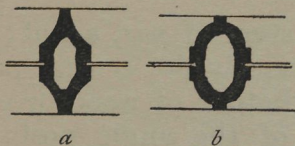


FIG. 186. MULLION

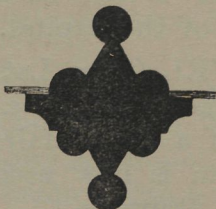


FIG. 187. WOOD MULLION

MUTULE. A broad flat member projecting slightly from the soffit of the corona of the cornice in the Doric order* and supposed to have originated in the overhanging ends of the rafters.

NAIL-HEAD ORNAMENT. An enrichment somewhat like nail heads, used in the Norman* period.

NAOS. See TEMPLE.

NARTHEX. A large porch across the end of a basilican church,* to which were admitted those who were not in full communion.

NAVE (Lat. *navis*, a ship; because the Church of Christ was commonly likened to a ship). The central part of a church; the term is sometimes applied to the corresponding part of a secular building.

NEBULE ORNAMENT. A shallow Norman enrichment consisting of a wavy line; the term is perhaps borrowed from heraldry.

NECESSARIUM. A necessary house, a privy. In the middle ages they were carefully arranged, either singly or in groups, in private houses; in monasteries* they were ranged in a long row in a separate building under which a ditch or stream was carried.

* See article thereon.

NECK OF A CAPITAL. The plain part of a capital from the neck moulding up to the bell mouldings or to the bend over of the foliage. The neck moulding is the small projecting ring quite at the bottom of the capital.

NEWEL (from Lat. *nuc-*, stem of *nux*, a nut; from its central position—s.). Formerly the central post or pillar of a spiral staircase, whether of wood or stone; the term is now used also of the angle posts in a straight staircase.

NICHE (Ital. *nicchia*, a niche, a shell-like recess in a wall; from Ital. *nicchio*, a shell—s.; the head of a Renaissance niche was often shaped like a shell.) A recess in a wall for a statue or other object; in the middle ages called a tabernacle,* and Inigo Jones applies this term to the niches of classical architecture (p.).

Previous to the end of the thirteenth century the niche had generally a flat or rounded back and was covered by a simple arch with perhaps a gablet over it. In the fourteenth century there is often a projecting canopy formed by bending out the arch, which in this case is an ogee, from the face of the wall as it rises; it is orna-

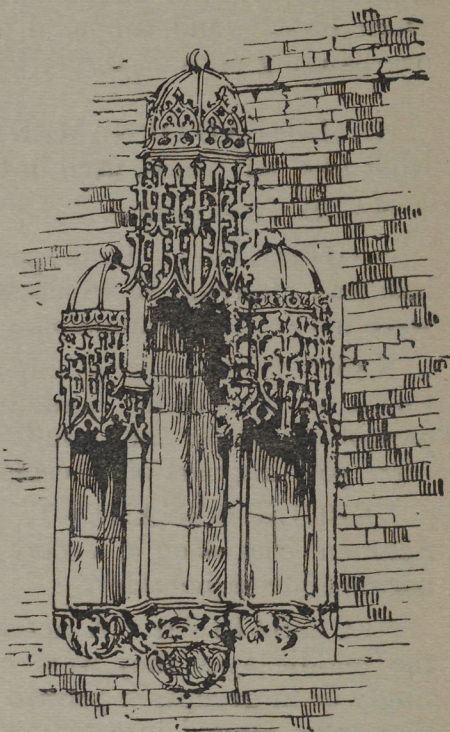


FIG. 188. BISHOP'S PALACE, ELY

* See article thereon.

mented with crockets and a finial. In the fifteenth century there are three small arches carrying a half hexagonal dome or spire (fig. 188); the back of the niche is also a half hexagon; the ceiling which is consequently a complete hexagon is ornamented with minute vaulting.

Elizabethan niches vary, according to circumstances, from a debased Gothic to pure classic. The Renaissance niche is generally semi-circular or semi-elliptical in plan. It is covered by a half dome which is either plain or coffered or is ornamented with a large shell. (fig. 67). A niche for a lamp is sometimes found in medieval churches and other buildings; occasionally there is a small flue to carry off the smoke (M.).

NOOK-SHAFT. A shaft in the nook or recess of a jamb (fig. 150).

NORMAN PERIOD. The name given by Rickman to a phase of English architecture during the time of the Norman kings; it is without definite limits, but considered by him to begin at 1066 and to end about 1189 (*see Appendix*). Its chief characteristics are as follows: The construction is massive; the masonry is rough with thick joints; the arches* are round, or in some of those of small span are trefoil; the walls are often decorated by small arcades of various forms, in some of these the adjoining arches intersect in a peculiar way (fig. 189); the parapet often projects and is carried on a corbel table; the buttresses are

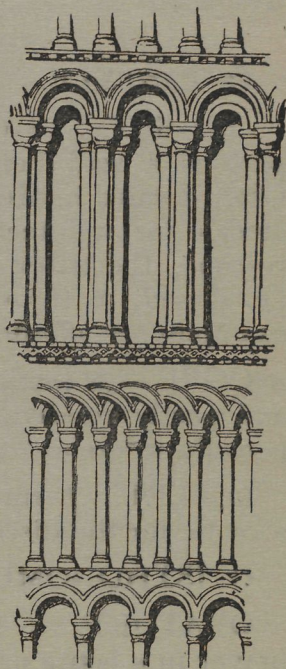


FIG. 189

INTERSECTING ARCHES

* See article thereon.

very wide and of slight projection ; doorways are often very highly decorated ; columns are round, or are rectangles either simple or with recesses at the angles containing small shafts, or are a combination of these forms ; the bases are low and insignificant ; the capitals* are of various forms ; vaults are either barrel-shaped or groined ; large buildings generally had wooden roofs of the 'trussed-rafter' form ; the mouldings are few and simple ; the enrichments (fig. 190) are various and elaborate, the commonest being the zigzag, billet, chevron, bird's beak, star, nail-head.

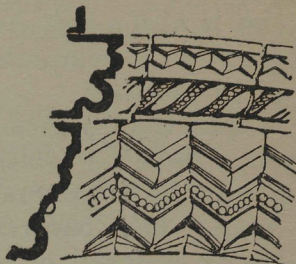


FIG. 190. NORMAN ORNAMENT

OCTASTYLE. *See* TEMPLE.

OFF-SET, SET-OFF. A ledge formed by the upper part of a wall being thinner than the lower part. Often formed inside a building to carry floor-joists, and outside for architectural effect or economy or for other reasons ; the latter are always more or less weathered, i.e. sloped, to throw off the rain. The most familiar examples are afforded by Gothic buttresses.*

OGEE. A compound curve partly convex and partly concave ; the term is applied especially to arches* and mouldings.*

FIG. 191
OGEE
ARCH

OILLET. A small loophole in the wall of a castle for the discharge of missiles.

OPISTHODOMUS. *See* TEMPLE.

ORATORY. A small private chapel or closet for prayer in a house or church.

* See article thereon.

ORDER, CLASSICAL. The column and entablature in Greek and Roman architecture. It includes the capital, the base (if any), the pedestal (if any), and the stylobate or platform if this is low, but if it is high enough to contain rooms and form a storey it is usually considered as a separate order.

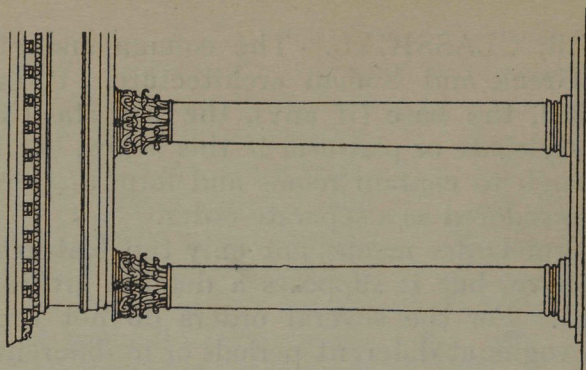
The term Order means not only the features mentioned above, but it supposes a definite architectural treatment. For the several orders do not represent styles in vogue at different periods or in different countries, but merely recognised types. One order is not the parent of another, like the various phases of Gothic architecture; nor do they merge into one another in any way, but each remains a distinct type which varies but slightly in different buildings. Each order is seen well advanced towards full development in the earliest examples; we know little of its period of growth.

The principal orders are the Doric, the Ionic and the Corinthian. These were all perfected by the Greeks. The sequence in which they have been named is to some extent chronological; that is, Doric buildings are generally the oldest; but the orders overlap and are even used together in the same building. The Romans adopted and varied them and added others which are really modifications of them, as will be described presently.

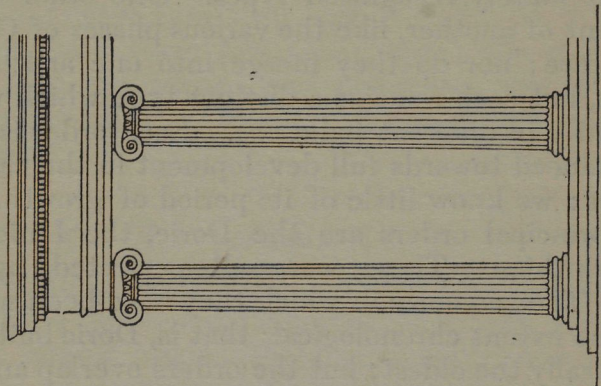
The general principles of all are the same: Columns support a lintel, above which is a decorated band and a projecting cornice. There is a difference in the proportions of the three, but even this is slight as compared, for example, with the difference between different periods, or even between different buildings of the same period in Western architecture. The difference is chiefly in the details and especially in the capitals.

The Greek Orders. The Greek Doric order is the simplest and the most massive (fig. 192). It has a

CORINTHIAN



IONIC



DORIC

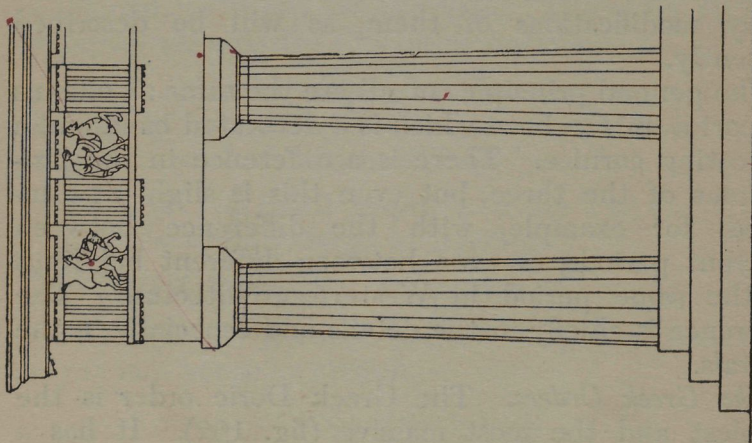


FIG. 192. THE GREEK ORDERS

stylobate, usually of three high steps. The columns are thick in proportion to their height: they have twenty elliptical flutes separated only by sharp edges; there is no base and the capital consists only of an abacus square in plan and in section, with a single moulding under it. The architrave is plain; the frieze is divided by triglyphs, or slight projections with vertical grooves, leaving square spaces called metopes which are sometimes carved; the cornice is simple, its soffit or lower side has flat mutules studded with guttae. The columns are about five diameters high, and the intercolumniation or clear space between the columns is about one diameter and a third; the height of the entablature is rather more than twice the diameter of the column.

The Greek Doric order is, it is thought, derived from buildings of timber. The architrave is said to be the successor of the wooden beam placed on the top of wooden posts stuck in the ground; the triglyphs to represent the ends of beams resting on the lintel and running back to the wall, the metopes being the filling in of the spaces between the beams; the sloping soffit of the cornice is the projection of the roof, the rafter-feet being reproduced in the mutules, and the pins used for the framing in the guttae; this theory accounts also for the absence of a base to the column. The hypothesis must be accepted till we have good grounds for abandoning it. We have similar examples (e.g. in Egypt) of archaic forms perpetuated in perfected architecture.

The Ionic order is much more slender in its proportions and more ornamented (fig. 192). It has a stylobate of three steps, rather similar to that of the Doric; the column has twenty-four semi-circular flutes separated by flat fillets; it has a moulded base and a remarkable square capital, which shows two large volutes or spirals on the front face and two on the

back. (A general idea of its form can be gained by rolling up a strip of paper from each end and then placing it with the scrolls downwards over an inverted tumbler.) The capital of the angle column had volutes on both its outer faces, the outermost angle having a single volute placed diagonally. The entablature is light and slightly decorated with mouldings and enrichments. The columns are between eight and nine diameters high and a little more than two diameters apart. The entablature is about two diameters high, that is, rather less than the intercolumniation.

The origin of the Ionic capital has been explained by various theories, none of which has for long commanded acceptance. The difficulty lies in the want of early examples showing different stages of development. It may be noted that the spiral is a favourite device of many primitive peoples, and had been an especially favourite device in Mycenæan art.

In its general proportions the Corinthian order is very like the Ionic (fig. 192). It was the latest to develop, and there are very few Greek examples. It will be more particularly described in speaking of the Roman orders. Its most striking feature is its capital, carved with foliage.

The explanation of the origin of the Corinthian capital is more venerable and more poetical, but it is not more satisfactory than the theories as to the volute.

“A *virgin* of *Corinth* being now grown up, fell sick and died : The Day after her Funeral, her *Nurse* having put into a *Basket* certain small Vessels and Trifles with which she was wont to divertise her self whilst she lived, went out and set them upon her *Tomb* ; and least the *Air* and *Weather* should do them any injury, She cover’d them with a *Tyle* : Now the *Basket* being accidentally plac’d upon the Root of an *Acanthus*, or great *Dock*, the Herb beginning to sprout at the spring of the Year, and put forth Leaves, the Stalks thereof creeping up along the Sides of the *Basket*, and meeting with the Edge of the *Tyle* (which jetted out beyond the

Margine of the *Basket*) were found (being a little more ponderous at the Extremes) to bend their Tops downwards, and form a pretty kind of *Voluta*. At this very time it was that the Sculptor *Callimachus* (who for the Delicateness of his Work upon Marble and Genteelness of his Invention, was by the *Athenians* surnamed *Catatechnos*, that is to say, *Industrious*) passing near this Monument, began to cast an Eye upon this *Basket*, and to consider the pretty Tenderness of that ornamental *Foliage* which grew about it, the Manner and Form whereof so much pleased him for the Novelty, that he shortly after made *Columns* at *Corinth* resembling this *Model*, and ordain'd its *Symmetries*, distributing afterwards in his Works Proportions agreeable to each of its other Members in Conformity to this *Corinthian Mode*." (*A Parallel of the Antient Architecture with the Modern*. By Roland Freart. Ed. by John Evelyn, Lond., 1723.)

There may be nothing impossible in this pretty story, but it is to the last degree improbable and need not be seriously considered. 'Invention,' however 'genteel,' has never been the parent of architectural features: these are the fruit of a slow growth.

The Greeks occasionally used another order, the Caryatid or Persian, in which human figures take the place of columns. The side portico of the Erechthæum at Athens is a famous example. The figures of Persians are believed to have been so used in another building.

The Greeks carried their architectural forms to an extraordinary pitch of refinement. Every curve was of the most subtle delicacy, not only of volutes and the like, but in the sections of all mouldings. The greatest judgment was exercised in the general proportions, in the details and in the character and disposition of the sculpture.

Their sensitiveness to form is perhaps most strikingly shown in the 'optical corrections' which they made in their buildings and especially in those of the Doric order. The diminution of the column upwards gives it great apparent rather than actual stability; its *entasis*

or swelling in the middle is to counteract an appearance of hollowness which it would otherwise have, principally through the strong sunlight behind it flowing round the edges to a greater extent in the middle part of the column than near the entablature and stylobate. In order to prevent the appearance of weakness at the angle of a temple which is entirely surrounded by columns, the angle column is made rather thicker than the others and the space between it and the next is reduced. But in order to give a look of still greater stability to the whole building, all the columns are given a very slight slope inwards. The horizontal lines are subjected to similar corrections. To prevent any possible appearance of sinking in the middle they are all bowed upwards; this is so boldly done that to anyone standing at the corner of the Parthenon the arching of the steps is quite obvious. Even the sloping lines of the pediment are curved in this way. It will be hardly necessary to point out that these minute corrections required extraordinary accuracy and enormously increased the trouble and cost of building.

The Roman Orders. The Roman Doric has a general resemblance to the Greek Doric. The flutes of the column are omitted, the capital is elaborated and spoilt.

The Romans used another variety of this order which they called the Tuscan; the ornaments, including the triglyphs, are omitted and the mouldings are fewer and bolder.

Again, in the Ionic order the Romans followed the Greeks. The volutes are smaller and less beautifully formed.

It was in the Corinthian order that the Roman most delighted (fig. 193); he used it with many variations and with great effect. The capital was very similar to that of the Greek order. There was generally added a small volute in the centre of each side, making eight volutes in all. The acanthus leaves

were elaborated, giving great richness with a loss of refinement. The abacus was sometimes enriched with egg and dart, as were also parts of the architrave. The cornice was very richly treated and often has modillions carved with acanthus; the frieze was sometimes sculptured with vulgar ornament, and sometimes instead of being flat had a convex section; the column was fluted or plain.

The Romans used yet another order, which is called the Composite, because its capital is a combination of the Ionic and Corinthian (fig. 194). The order is really a variety of the Corinthian. The abacus has the plan of the Corinthian abacus—a square with convex sides. Under the projecting angles there are large volutes placed diagonally and springing from behind a band of egg and dart borrowed from the Ionic. The lower part of the capital has rows of acanthus like the Corinthian. The column is sometimes plain, sometimes fluted;



FIG. 193. CORINTHIAN CAPITAL



FIG. 194. COMPOSITE CAPITAL

in some examples the flutes are filled to one-third of their height with a staff or bead, and are said to be 'cabled.'

In the Ionic, Corinthian and Composite the Romans sometimes placed each column on a square pedestal with a moulded capital and base. They raised some of

their buildings on a stylobate or podium high enough to constitute a separate order, and they also sometimes used an 'Attic order,' a low plain wall, over their main order. In buildings of several storeys they decorated each storey with an order, placing the Doric, as the most sturdy, at the bottom, and the Corinthian, as the most ornate, at the top.

The orders were also used in connexion with arches. It is, however, only in rare instances that the arch springs from the entablature; generally it rises from a pilaster placed against the column, which is high enough to allow the entablature to pass over the top of the arch. The order in such a case is in fact a mere ornament placed against the wall. This use of the order allowed the Romans to widen the intercolumniation to any extent, for the entablature was carried by the wall, and its strength had not to be considered.

The terms which are used to describe the various forms of porticoes and the spacing of the columns are given in the article TEMPLE (p. 261).

These terms and the rules for the proportions of the orders and their parts are the work of Vitruvius (first century B.C.), the only ancient writer on architecture whose works are extant, and of the Italian architects of the Renaissance. The rules were carried to an absurd degree of elaboration, being applied to the minutest members. They were not followed by the Romans, and doubtless were undreamed of by the Greeks.

But even in ancient work each order does follow to some extent the same general proportions in most examples, and thus it is possible, within wide limits, to lay down rules. The fact is that the proportions of the orders were based on a different principle from that to which we are accustomed in Gothic architecture. With us the *number* of members or parts is increased or diminished according as the building is large or small, but their size does not vary much. In the classical

orders the number of members remains constant, and their *size* is increased or diminished. The unit of measurement is usually half the diameter of the column at the base, and is called a module.

(For different forms of portico, *see* TEMPLE.)

ORDER OF AN ARCH. One ring of stones or bricks in an arch. If the arch consists of several concentric rings it is said to be of several orders.

ORIEL. A bow-window in a Gothic building either standing on the ground or corbelled out from the wall. There is some obscurity about the use of the term in the middle ages. Professor Skeat suggests that it is derived from *aureolum*, that which is ornamented with gold, as the vault of a bow-window frequently was in the middle ages.

ORIENTATION. The placing of a building with one end towards the east. There has been a tendency at all times and in many religions to make the door of a place of worship on the east side so that the rising sun should shine in. The earliest Christian churches* were placed with the entrance to the east, perhaps in imitation of the Temple at Jerusalem.

OSSUARIUM. *See* CHARNEL HOUSE.

OVOLO. *See* MOULDING (fig. 180).

PACE. *See* FOOT-PACE.

PAINTED GLASS. *See* GLASS.

PAINTING. Colour has at all times been used on the walls, ceilings and other parts of buildings in England, both in pictures and in decorative devices. In medieval buildings, both sacred and secular, the subjects were chosen from the Scriptures, from legends of the saints, and from myths or moral tales and

* *See* article thereon.

miracles. In motive they were perhaps more often devotional than educational or purely decorative. After the Reformation there was very much less painting; in churches the subjects were limited to the Scriptures, and to portions only of these; in secular buildings profane subjects were more common.

Few, if any, examples earlier than the Conquest remain, but buildings were certainly painted and there are contemporary allusions to the fact; for example, in 816 a canon was issued requiring bishops to see that before consecrating a church it contained a picture of its patron saint (κ.). Norman paintings are fairly numerous. They consist of pictures of Christ in Majesty and of scenes from His life; figures of St. Michael and of St. Thomas of Canterbury and of apostles and saints; a great variety of decorative patterns, architectural forms, scrolls and stiff foliage, imitation hangings and occasionally sentences. The work retains some of its Norman characteristics as late as 1220 (κ.).

In the reign of Henry III. the art made good progress owing, no doubt, to the encouragement of the king and the introduction of foreign artists. Most of the work was, however, done by Englishmen, as is clear from the character of the work and from the recorded names of the painters who were often (perhaps generally) professional laymen whether the building was ecclesiastical or secular (κ.) The work of this and the following reigns, though not without some archaic mannerisms, is full of beautiful feeling, and will compare with the contemporary work of Italy and perhaps with that of France. The principal subjects are scenes from the life of Our Lord; and the Virgin, St. Catherine, St. Thomas of Canterbury, St. Edmund and other saints, the figures being often placed in medallions; St. Michael weighing souls; myths or moralities such as the wheel of Fortune. The curious practice prevailed of plastering even the finest work and then painting it

with a representation of masonry. Diapered hangings were also represented and rather formal scrolls of foliage are very common. Examples of painting are also found outside buildings.

“The paintings of the fourteenth century do not show any marked advance over those of the preceding era, though a greater diversity of subjects was then introduced and the pictures seem on the whole to have been more skilfully executed. The same careful attention to the due preparation of the wall surface appears often to have been neglected” (κ.). The subjects in the chancel are generally scenes from the New Testament, though these are also often found in other parts of the church, with legends of the saints and ‘moralities’; the ‘Doom’ or Last Judgment is usually painted on the wall above the chancel arch. The most popular saints were St. Margaret, St. Edward the Confessor, St. Anthony, St. Sebastian, and especially St. Catherine of Alexandria and St. Thomas à Becket. St. Nicholas who was very popular is comparatively seldom found. The moralities are ‘The Seven Deadly Sins,’ ‘The Seven Acts of Mercy’ and ‘The Seven Sacraments’ (κ.). The decorative patterns are elaborate and beautiful; arabesques of flowers and fruit are naturally treated, powderings and scrolls are also used, and heraldry becomes more common. Architectural members are in this as in the preceding and succeeding periods emphasised with colour and gilding, and the naturally carved foliage of this period seems to have been boldly and yet delicately treated in this way.

The greater number of extant examples of medieval painting appear to belong to the fifteenth century, but these are often found to have been painted over earlier pictures which, where exposed, are generally found to be still in a state of good preservation. There is a very great variety of subjects owing to the increased intercourse with other countries and the settlement of

foreigners in the eastern counties. The most common are scenes from the life of Our Lord, from the long apocryphal life of the Virgin, the Doom, the life of St. Catherine, the murder of St. Thomas of Canterbury, St. George the patron saint of England and of soldiers, the moralities of the preceding period to which were added, 'Les Trois Rois morts et les Trois Rois Vifs' and the 'Dance of Death' (κ.).

Perhaps the most remarkable phenomenon is the growth in the popularity of St. Christopher. A picture of him carrying the infant Christ across the river was probably painted on every church and is still found in many. The painting was large and in a conspicuous position, generally near the principal entrance, for the belief was that anyone who looked on it was safe for that day from violent death. Pictures of the Holy Trinity seem also to have been common, but most were destroyed by special order during the Commonwealth (κ.). Usually the Father is seated on the Throne supporting the crucified Saviour in front of him while the Holy Spirit, in the form of a dove, hovers above. The coronation of the Virgin was probably common also, though it is not found very often now. Decorative painting includes many patterns, powderings, natural foliage, birds and beasts; architectural features are enriched with patterns, such as the spiral scroll, the chevron; the monograms of Christ, the Virgin and some of the most well-known saints are common.

The screens which formerly existed in every church were, beyond question, invariably richly coloured. The great majority of the remaining examples are of the fifteenth century; there are some few of the fourteenth, while those of the thirteenth are rare. The panels of the lower part were sometimes decorated with a pattern, but were often painted with the figures of the apostles and evangelists, St. Paul and St. John Baptist, the Fathers of the Western Church (SS. Am-

brose, Augustine, Gregory, Jerome), SS. Mary Magdalene, Catherine, Margaret, Agatha, Agnes, George, Anthony, Apollonia, Blaise, Lawrence, Sebastian, and others, and the English saints Edmund, Edward the Confessor, Edward, King and Martyr, Wolstan, and Thomas of Canterbury. The mullions and tracery of the upper part were entirely covered with colour and gilding, the various mouldings being painted with different colours and enriched with patterns and spirals and powderings of flowers and leaves. The panels forming the front of the rood gallery were doubtless painted with figures of saints like those of the lower part, but few examples remain. The chancel arch was often filled with a partition on which was painted the scene of the Crucifixion or other subject.

A few examples of painted wood reredoses remain. The best known are those at Westminster Abbey and Norwich Cathedral. Sculptured stone and alabaster reredoses and monuments were also painted.

Open timber roofs were decorated with monograms and sprays of foliage and other devices on the rafters and boarding, while the mouldings were enriched with the chevron and spiral; few colours, and those of a subdued tone, were used. Wood ceilings, both flat and canted, and wood vaults were treated rather more elaborately. Peterborough Cathedral, St. Albans Abbey, and the Great Hospital at Norwich are good examples. In the case of a church the whole roof or ceiling is sometimes decorated, but often only the easternmost bay of the chancel or aisle or nave, because that part would be over an altar or the rood.

Although churches now contain, and no doubt always did possess, the greater number of paintings, it must be remembered that other buildings—the secular parts of monasteries, castles, and private houses—were also decorated in this way.

At the Reformation the first order for the destruc-

tion of images, relics and shrines was made in 1541. This order probably applied also to paintings. Texts from Scripture were painted in their place. These were destroyed by Queen Mary, and were painted again in the reign of Elizabeth. Fragments of them are not uncommon. With this exception little painting has been done in churches since the reign of Henry VIII. There was sometimes at the east end an oil-painting of some scene from the Old or New Testament, or figures of Moses and Aaron, or of Time and Death, and sometimes the Ten Commandments, painted on wood, surrounded with a decorative border.

Wall painting in secular buildings was killed by the introduction of easel pictures on canvas or panel, and these do not fall within the scope of this article. There are a few instances of subject-pictures, verses and decorative patterns, architectural forms, such as square or arched panels, and imitation of marble. The ceilings of great houses were occasionally painted with pictures after the Restoration.

A few words may be said about the processes. The wall paintings were done in *tempera* or 'distemper.' The wall was finished with a coat of very fine plaster, which was allowed to dry. The colours were mixed with 'size,' a sort of glue made by boiling down parchment. Some paintings, even as early as the fourteenth century, are believed to be in oil colours. Fresco* was not used. In paintings on wood the process was similar, but more delicate and minute in finish. The surface was covered with a thin coat of *gesso*, that is, fine hard plaster about as thick as notepaper, and the size used for mixing the colours was made from eggs beaten up with the juice of shoots of the fig-tree. Oil colours seem also to have been used on *gesso* as a ground or preparation for *tempera* (κ.).

PALACE (from Lat. *palatium*, originally a building on the *Palatine* hill in Rome, especially a palace of

Nero on this hill—s.). In England the term is applied only to royal and episcopal residences and to one or two great county houses, e.g. Blenheim.

PALLADIAN SCHOOL OF ARCHITECTURE. A style of architecture founded upon the work of Andrea Palladio, 1518–80, an architect of Vicenza and Venice, whose manner was adopted by Inigo Jones in his Whitehall Palace and other buildings and thus introduced into England.

PANE (Fr. *pan*, 'a pane, piece, pannell,' from Lat. *pannus*, a cloth, rag, patch—s.). (1) A piece of glass in a window. (2) [rare] A subdivision of some part of a building, e.g. one walk or alley of a cloister, one side of a spire, the space between two timbers in a half-timber building.

PANEL (dim. of **PANE**). A board placed in a frame; hence any surface, no matter what the material, surrounded by a frame or by a moulding.

Single panels of various shapes, as trefoil, quatrefoil, are used in masonry of all periods as a decoration or to contain sculpture or painting.

PANELLING. A series of panels. Used in woodwork, as decoration in stonework and in the plaster-work of walls and ceilings.

Wood panelling on walls was probably used at all periods, certainly very extensively from the time of Henry VII. From his time to the middle of the seventeenth century the panels are small and nearly square; the mouldings are worked partly on the edges of the styles and rails, dying away as they approach the angle of the panel, and partly as grooves on the centre of the framing. The panels themselves are often worked with a peculiar series of mouldings bearing some resemblance to a folded cloth, whence they are called 'linen-panels.'* From the beginning of the seventeenth

* See article thereon.

century the more correctly classical buildings have very large panels, with an ovolo moulding on the edge of the framing or a bolection moulding, that is, one projecting

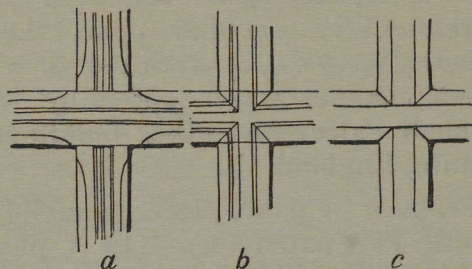


FIG. 195. METHODS OF FRAMING PANELLING

beyond the face of the framework; the mouldings are always mitred, that is, they intersect at the angles like an ordinary picture-frame.

PAN TILE. *See* TILE: ROOF.

PARADISE, PARVISE. "A court or atrium in front of a church, usually surrounded with cloisters, either wholly or in part. Sometimes the term is applied to a churchyard or cemetery or to the principal or regular cloister-garth of a monastery. In the latter sense it may be used to include the buildings that surround the regular cloister. It is not unusual to find a memorial of the paradise preserved in the name of a street or court. Many towns which once possessed monasteries have a paradise street. . . . The ancient plan of St. Gall shows a 'paradisus' at each end of the church (fig. 59). Spon, in the account of his travels in 1675, calls the pronaos (*see* TEMPLE) of the Parthenon at Athens a parvis. Some modern writers have applied the term parvis to the room often found over church porches, but apparently without any authority" (P.). A room over a church porch (s.). Not a room over a church porch (N.E.D.).

PARAPET. A low wall rising above the gutter of a roof. In a castle it is generally battlemented and has oilets, in churches and other buildings it varies according to the fashion of the period.

The Norman parapet is low and has a continuous coping; in the thirteenth century it has sometimes battlements* and sometimes is pierced with tracery; these features become more common in the fourteenth century; in the fifteenth century, though it has generally plain battlements (fig. 196), the parapet is, in elaborate work, sometimes pierced with tracery as well as battlemented. Elizabethan parapets are sometimes pierced with strapwork* or have a large inscription.* The later parapets are plain or take the form of a balustrade.*



FIG. 196. PARAPET WITH STEPPED BATTLEMENTS

PARCLOSE. A screen to separate a chapel from the rest of a church or for other similar purpose.

PARGETTING. Plaster-work.* The term appears formerly to have been used in several senses, sometimes for plain plastering on walls, but usually for such as was made ornamental; it is now seldom used.

PARLOUR. (1) A private sitting-room in a medieval house at the upper end of the hall; not always to be distinguished from the solar*; the family withdrew into it more and more as time went on, as Piers Ploughman complains. Its place was taken by the modern drawing-room (the 'withdrawing room'), but the name was transferred to the smaller room which the family used more habitually than the drawing-room. This room being now almost a thing of the past the word parlour is becoming rare, except in some special buildings, e.g. the 'Mayor's parlour' in

* See article thereon.

a town hall, the parlour of an inn. (2) A room in a monastery* in which monks were allowed to see their friends from the outer world.

PARQUETRY. Flooring formed of a veneer of hard polished wood on a ground of ordinary deal boards.

PASCAL CANDLESTICK. See **CANDLESTICK.**

PATEN. A flat 'open' dish, especially that used for the bread at the Holy Communion. In the middle ages they were of silver or gold as prescribed for chalices* in 847. They have usually a depression of four, eight or ten lobes, with an engraving of the Manus Dei, or the head of Our Lord, or other device in the centre.

The paten of the sixteenth century was made, when turned upside down, to fit on to the Communion cup as a cover. It has a saucer-shaped depression, a narrow rim with a standing flange to keep it in position when placed on the cup, and a short concave stem. The date is often engraved on the foot, and in the dish the initials IHS. The patens of the seventeenth and eighteenth centuries are not fitted to make a cover to the cup; they are much larger and resemble ordinary domestic salvers.

PATERA (Lat. *patera*, a dish). A flat circular ornament on an architrave or frieze.

PAVEMENT. A floor of tile,* marble or stone. Pavements of stone and Purbeck marble were used in the middle ages, but tile seems to have been preferred for the best buildings. At the Renaissance stone and true marble, or the two mixed, were more common.

PAVILION (Fr. *pavillon*, a tent, 'so called because spread out like the wings of a butterfly'; from Lat. *papilio*, a butterfly, a tent—s.). A name given to parts of a Renaissance house which are detached or nearly

* See article thereon.

detached from the main building, such as corner towers in Elizabethan houses, and the low projecting wings of a Georgian house. They are usually square and covered with a pyramidal roof.

PEDESTAL. The columns of the classical orders* were sometimes raised on square pedestals.

PEDIMENT. The gable of a Classical or Renaissance building. It is generally triangular, but is sometimes bowed and sometimes, in both triangular and bowed pediments, the central part is omitted, forming what is called a 'broken pediment' (fig. 197).



FIG. 197. BROKEN PEDIMENT

PELE-TOWER. "This term is almost peculiar to the northern parts of the kingdom; it seems to have signified a small fortress, dwelling, or tower capable of being defended against any sudden marauding expedition" (P.).

PELLET ORNAMENT. A Norman enrichment consisting of flat discs.

PENDANT. (1) A boss or other part hanging down from a stone vault, characteristic of late Gothic work. (2) A similar feature in an Elizabethan plaster ceiling. (3) A post forming part of the truss of an open timber roof, placed against the wall to receive the curved brace.

PENDENTIVE. "The portion of a groined ceiling supported by one pillar or impost and bounded by the ridges of the longitudinal and transverse vaults. . . . Also the portion of a domical vault which descends into the corner of an angular building

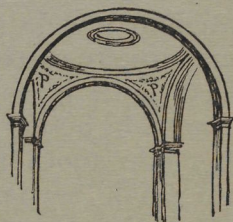


FIG. 198.

DOME ON PENDENTIVES

* See article thereon.

when a ceiling of this kind is placed over a straight-sided area" (P.) (fig. 198). *See also* DOME.

PENTASTYLE. *See* TEMPLE.

PENTHOUSE (Lat. *appendicium*, an appendage; corrupted from *pentice*, but the present form of the word is as old as Shakespeare). A hanging roof, a lean-to roof bracketed out from a wall. (*See* SHOP.)

PERIPTERAL. *See* TEMPLE.

PERISTYLE. *See* TEMPLE.

PERPENDICULAR PERIOD. The name given by Rickman to a phase of English architecture without definite limits, but considered by him to begin about 1377 and to end about 1547. (*See* Appendix.) Its chief characteristics are as follows: Window tracery consists entirely of vertical members; doorways often have two hood-moulds, one following the arch, the other being horizontal and turned down at each end to meet the inner hood-mould at the springing of the arch; the columns usually consist of small half-shafts alternating with wide shallow hollows, the half-shafts only having capitals and bases; capitals are small and are more usually moulded than carved; the bases are high but are of slight projection; the arches are either of two arcs forming a blunt point or they consist of four arcs and are known as 'four-centred'; mouldings are worked on the splayed face and consist of small members, such as ogees, separated by a wide shallow hollow called a casement, they are usually carried down the jambs of doors and often also down large columns; enrichments are (*a*) leaves placed in hollow mouldings at intervals, (*b*) leaves joining one another as an upright resting on a cornice, (*c*) small battlements; two kinds of vault are used, (1) groining somewhat similar to that of the preceding periods, (2) fan-vaulting; roofs are generally of

the hammer-beam type and are of fairly steep pitch, but in late work they become flat and the purlins rest directly on a heavy tie-beam.

PERSIAN ORDER. See ORDER: CLASSICAL, p. 199.

PEW ('Old Fr. *pui*, an elevated space; *puye*, an open gallery with rails—hence applied to an enclosed space or to a raised desk to kneel at—from Lat. *podium*,* a balcony'—s.). The original sense is preserved in the term 'Royal Pew' at St. George's Chapel, Windsor, the 'Prior's Pew' in conventual churches, as at St. Bartholomew's, Smithfield. The family pew in the private chapel was sometimes in a raised gallery, the servants sitting below. The transition from the original sense to the more common secondary meaning was perhaps due to the large family pews made in some churches before the Reformation; they were enclosed by screens, but were not raised above the floor of the church. The term was applied to ordinary seats in the middle of the fifteenth century (p.) and perhaps earlier. It is uncertain when churches were first furnished with seats in the present fashion, but numerous examples of the fifteenth century remain. The passages are wide, and the seats which are fixed to a continuous kerb have plenty of room between them. They are often low benches without backs, but with ends finished with poppy-heads.* Another and probably a later type has a panelled back and square-framed ends with traceried panels and little buttresses stuck against the styles. Probably the same patterns were followed in the sixteenth century with little change except in details. In the first half of the seventeenth century the seats had sometimes low, square-framed ends and backs, but there are also examples of the high-panelled pews with doors, which became universal in the eighteenth century and con-

* See article thereon.

tinued to be so till the middle of the nineteenth century. Laud had ordered in 1636 that pews were not to be much above a yard high.

PICTURE. This word is often used in old writings for carved reliefs. (*See also* PAINTING.)

PIER. An isolated mass of masonry, e.g. the wall between two windows if these are at all near together; a large column such as those of the arcade between the nave and aisles in a Norman church as distinguished from the more slender pillars and columns,* or the still slighter and often purely decorative shaft.*

PIER-ARCHES. A name given by some modern writers to the nave-arcades, i.e. the arches between the nave and aisles.

PIGEON-HOUSE. In the middle ages when pigeons were an important article of food the pigeon-house of the manor and of the monastery was a large detached building with nests for several thousand birds. It was generally square or round in plan (fig. 199) and had at the apex of the roof an opening, protected by a small upper roof, for the entrance and exit of the birds. The inner face of the walls was honeycombed with small recesses for the nests. In the centre there was a revolving post with two horizontal arms at right

* See article thereon.

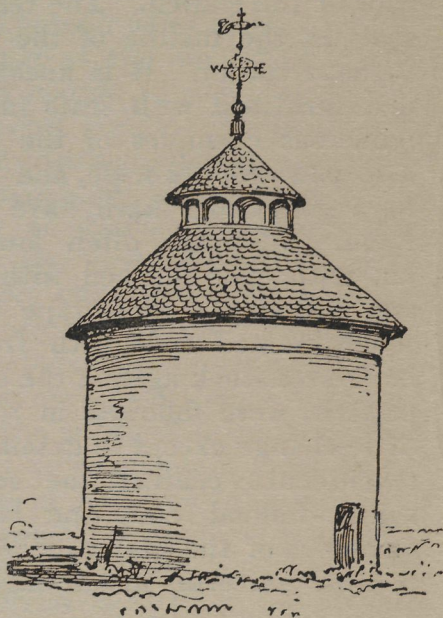


FIG 199. PIGEON-HOUSE

angles to each other projecting from the top and bottom; on the ends of these arms a ladder was fixed. By this means easy access could be had to every nest.

PILASTER. A flat column, rectangular in plan, placed against a wall.

PILLAR. *See* COLUMN.

PINNACLE. A small solid tower, usually surmounted by a spire, rising from the top of a wall or buttress. Pinnacles are rare at the end of the twelfth and in the first half of the thirteenth centuries, but become more and more common up to the end of the medieval period. The early examples are generally in the form of an octagonal column with a capital and a low spire, or a cluster of shafts with or without arches above them. From the latter part of the thirteenth century the smaller pinnacles are usually square and have a gablet on each side from which rises a crocketed spire; the sides sometimes have niches; the larger pinnacles, such as those at the angles of a building, are small octagonal turrets, often pierced; in late work they are elaborated with diminutive architecture, having pinnacles, buttresses and even flying buttresses of their own.

PISCINA. A lavatory. It is found in almost every church and consists of a shallow stone bowl in a small niche in the south wall of the chancel near the altar; it has a drain and was used for washing the Communion vessels. The niche is often double and has two bowls. There is sometimes a narrow stone shelf at the back of the niche.

PLASTER-WORK. There can be little doubt that at every period and in every part of the world most buildings have been covered with plaster internally and, unless built of the finest masonry (though not

even all those buildings are to be excepted), externally also. The practice of leaving rubble or other rough walls uncovered is entirely English and modern. (*See also* pp. 147, 209).

Plaster-work in relief, called 'pargetting,'* was probably used in the middle ages, though it seems that no examples earlier than the sixteenth century remain. It was used by Henry VIII. at his palace of Nonesuch and there are many examples of Elizabeth's reign. Of these examples the most remarkable are the decorated ceilings. The whole surface is divided into panels of varied shapes containing devices, the broad bands which divide the panels being moulded and ornamented with a scroll of vine. The outsides of houses are also decorated with patterns which are often similar to those of lead-glazing in windows, only larger. Human and grotesque figures are also moulded in low relief, especially in some parts of the eastern counties where elaborate half-timber work was less used. These methods continued till the Civil War and perhaps later. Another form of decoration, common in the humbler buildings, still practised but probably of remote antiquity, consists of large panels filled with a small stamped pattern divided by broad flat bands.

The ceilings of the later Renaissance, that is, subsequent to the Restoration, are enriched with plaster-work, but the treatment is quite different from that of Elizabethan times. Instead of a repeating pattern of small panels, there is a central device with scroll-work disposed round it, or the ceiling is divided up into large deeply recessed square cells or coffers* richly moulded; this latter method is much used for vaults and domes.* (*See also* GESSO, STUCCO.)

PLATE-TRACERY. *See* TRACERY.

* See article thereon.

PLINTH (*πλίνθος*, a brick, tile, plinth). A projecting base of a wall or column. In most buildings of the middle ages it has a plain chamfer (fig. 200), in the more elaborate it is richly moulded, and in late buildings panelled and otherwise decorated. In the early buildings of the Renaissance the plinth is moulded, but from the beginning of the seventeenth century it is a plain square projection.

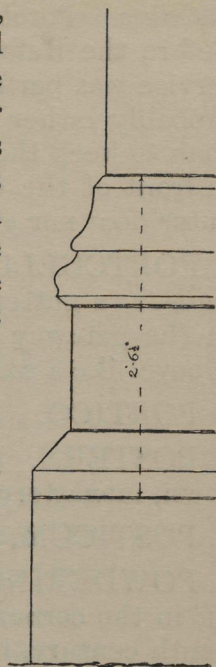
PODIUM (Gk. *πόδιον*, a little foot). The base, plinth, or stylobate of a Classical or Renaissance building; it is either plain or is treated like the pedestal of a column, with base and cornice.

POPPY-HEAD. The finial of a bench-end.

PORCH (Lat. *porticus*, a porch). The early church* of the Celtic type had a small porch at the west end; that of the basilican type had a large narthex stretching across the end of the building with three outer and three inner doorways; in the fully developed Saxon church the porches were on the north and south sides. The medieval church and the medieval house had commonly a porch only in front of the principal side-entrance. In the fifteenth century there is often a room over the porch.

The south porch of the cathedral church of Canterbury is described by Eadmer, writing in the first quarter of the twelfth century, as being habitually used as a supreme court of law which was known as the

FIG. 200. PLINTH
Fifteenth century



* See article thereon.

Suthdure. Porches also contained altars in early times. Before the Reformation the first part of the marriage service was performed at the church door, and it was probably rather to serve as a shelter on such occasions than to keep the church warm that a porch was erected in front of the chief entrance, for it generally had no outer door nor glass in the windows.

PORTCULLIS (a 'sliding door'—s.; according to *P. cullis* is 'a gutter, groove, channel'). An open grating in the gateway of a castle* made to rise and fall in a groove like a sash window.

PORTICO. *See* TEMPLE.

POSTERN. A small private entrance to a castle,* town, monastery, or other building.

POSTICUM. *See* TEMPLE.

POWDERING ROOM. A small closet partitioned off in the corner of a bedroom in a house of the eighteenth century, into which the occupant could retire to have his or her hair powdered.

The powder was showered on from a 'powdering-horn' like salt from a muffineer, and it was therefore necessary to protect the clothes. There seem to have been several ways of doing this; either the person put on a 'powdering gown'; or two curtains were hung across the powdering room and the hairdresser stood on one side and the person to be powdered stood on the other and put his head through the division between the curtains, drawing them round his neck; or the hairdresser went into the powdering room and closed the door, and the person to be operated upon stood outside and put his head through a hole contrived in the door and fitted with a falling shutter, the lower part of the hole and the bottom edge of the shutter being so shaped as to fit closely round the neck.

* See article thereon.

PRECEPTORY. A subordinate establishment of the Knights Templars, governed by a Preceptor.

PRESBYTERY. The part of a church occupied by the priests; in a cathedral or monastic church it generally occupies the east limb of the cross, while the choir extends from the east arch of the crossing to about one-third of the way down the nave.

PRIORY. A monastery governed by a prior or prioress; of lower standing than an abbey; but many of the greatest monasteries were priories from the fact that, originally abbeys, the churches had been made cathedrals and the abbacy had been merged in the bishopric.

PROCESSION PATH. The route taken by processions in a cathedral or monastic church; the passage or aisle passing behind the high altar; 'the compasse, circuit or wall of y^e Church' (P.).

PRODOMUS. See TEMPLE.

PROSTYLE. See TEMPLE.

PSEUDO-DIPTERAL. See TEMPLE.

PSEUDO-PERIPTERAL. See TEMPLE.

PULPIT (Lat. *pulpitum*, a stage, scaffold). There are no early pulpits in England, and it may be doubted if there were many pulpits in churches. The earliest that remain appear to be very late fourteenth century; but even these are very rare, and the greater number of medieval examples are late fifteenth century or early sixteenth. They are of wood and of stone, and sometimes stand at some distance from the east end of the nave. In the Injunctions of Edward VI. in 1547 it was ordered that the parish "shall provide a comely and honest pulpit" in those churches which have not one, and the epistle and gospel were to be read from there or from other convenient place. Many pulpits of

inferior workmanship evidently date from the reigns of Elizabeth and James I. Later pulpits were often made very high on account of the erection of galleries. They, and some of the earlier examples, often had sounding-boards,* but these, though frequently of excellent design and good workmanship, have been very generally removed in the process of 'restoration.'

PULPITUM. A gallery or loft between the nave and the ritual choir of a cathedral or conventual church. The choir usually extended into the nave. The pulpitum was supported by two solid walls which crossed the nave thus enclosing one of its bays; in the middle of each of these walls there was a doorway. One bay further west there was another wall forming a reredos to the principal altar of the nave; there were two doors in this wall, one at each end of the altar. A screen of some sort was also extended across each aisle so as to make the separation of the choir from the nave complete. The pulpitum supported the great crucifix or rood with its attendant figures of the Virgin, St. John and angels, and also the organs and perhaps singers. (*See also* MONASTERY, PULPIT, SCREEN.)

PURBECK MARBLE. A hard limestone capable of taking a high polish, found in the isle of Purbeck on the Dorsetshire coast. It was much used in the thirteenth century for thin shafts and sometimes also for carved capitals, and in the fifteenth century for altar tombs and for the matrixes of brasses.

PURLIN. *See* ROOF.

PYCNOSTYLE. *See* TEMPLE.

PYX. A vessel to contain the reserved sacrament. It was hung over the high altar. "A pulley or a sort of crane was fixed there with gear for raising and lowering, and the pyx was hung by a cord or chain

* *See* article thereon.

attached to a ring on its top. Above it was hung the canopy, a round tent-shaped thing of linen or silk, kept in form by a metal ring, and sometimes highly ornamented. The pyx itself was veiled in the pyx cloth, which was a square napkin with a hole in the middle through which the suspending cord passed, and weighted tassels at the four corners which kept it down close by the pyx" (M.).

QUADRANGLE. A term given at Oxford to the courtyard of a college; called at Cambridge and other places a court.

QUARREL, QUARRY (Lat. *quadrus*, square). A square or diamond pane of glass; a square paving-stone or tile.

QUATREFOIL. A window or panel formed into four leaves by cusping.

QUATRO-CENTO (lit. 'four hundred'). A short expression for the century which began in 1401, used especially in connexion with art.

QUIRK (from Welsh *chwiori*, to turn briskly—s.). A sharp groove between a convex moulding and a fillet (fig. 184).

QUOIN. A corner-stone. (*See* LONG-AND-SHORT WORK.)

RAFTER. *See* ROOF.

RAIN-WATER HEAD, CISTERN HEAD. An iron or lead tank at the top of a pipe acting as a funnel to receive the rain-water from a roof-gutter.

In early times, if there was a parapet, the roof water was discharged through a gargoyle* by which it was thrown clear of the building. It seems that it was in the fifteenth century that this system began to be superseded by pipes. But in some buildings, even late in the seventeenth century, the pipes were not

* See article thereon.

continued to the ground, but were bent out about half-way down the wall to form gargoyles. Lead was used for both the heads and the pipes (which were generally square) till the nineteenth century, when it was superseded by iron as being cheaper. Iron gutters were fixed to overhanging eaves at the same period. In the seventeenth and eighteenth centuries there had been a lead gutter on the top of a wood or stone cornice, and before the seventeenth or at least before the sixteenth century there was probably not often a gutter of any sort. Where the eaves overhang, the gutter can be conveniently connected to the pipe by a 'swan-neck' without any cistern head, hence they are much less used than formerly.

Rain-water heads were generally treated in a more or less decorative way. They frequently bear the date of the building or heraldic or other devices. The early examples are generally rectangular boxes, sometimes of considerable length, with decorated fronts, but in later times the form becomes elaborate.

RAMP. A steep slope, e.g. in the part of a hand-rail of a staircase which is steeper than the rest; the slope of a garden wall which is higher in one place than in another.

READING-DESK, READING-PEW. A pew occupied by the clergyman in English churches* from the beginning of the seventeenth century till the middle of the nineteenth. It formed a part of what was nicknamed a 'three-decker' after the old man-of-war, the clerk's pew being at a rather lower level just in front of it and the pulpit behind it being raised considerably above it. (*See also* LECTERN.)

REBATE, RABBET. A continuous rectangular recess cut on the edge of a solid. It is used chiefly

* See article thereon.

for jointing boards or for fitting one object to another, e.g. in a picture-frame for holding the glass, but it is also used as an architectural feature.

REBUS (Lat. *rebus*, by things). The representation of a proper name by means of a picture. A very favourite form of pun in the middle ages, both in heraldry and in architecture. The rebus of Walter Lyhart, Bishop of Norwich, was a hart lying in the water. Anyone whose name ended in 'ton' always used a barrel or tun as his rebus.

RECTILINEAR PERIOD. The same as **PERPENDICULAR*** PERIOD.

REEDING. *See* **MOULDING** (fig. 185).

REFECTORY. A dining-hall, especially that of a monastery* (p. 158).

REGULA. A band below the *tænia** under the triglyphs.

REGULARS. Religious orders living under a 'Rule.'

RELIC CHAMBER. A chamber in a cathedral or other large church in which the relics of saints were preserved.

RELIEVING ARCH. *See* **ARCH.**

RELIEVO, RELIEF. A modelled surface, as distinguished from sculpture which is 'in the round,' i.e. completely detached from any background. **Basso-relievo:** low relief, in which the object has less than half its natural projection. **Mezzo-relievo:** middle relief, in which the object has half its natural projection. **Alto-relievo:** in which the object has more than half its natural projection.

RELIGIOUS HOUSE. *See* **MONASTERY.**

* See article thereon.

RELIQUARY. A vessel to contain the relic of a saint, such as a piece of bone. It often had a glass side so that the relic could be shown: whence it is sometimes called a 'monstrance,' which is a term more properly applied to a vessel for showing the consecrated wafer.

RENAISSANCE ARCHITECTURE. The architecture founded upon the classical styles at the period of the general revival of letters. The term is used in the following article as including the work of the sixteenth, seventeenth and eighteenth centuries, notwithstanding that in the first part of this period there is a strong, and even preponderating admixture of Gothic feeling and detail, and that this reappears in the middle of the seventeenth century, while the term 'new birth' is scarcely applicable to the decadent work of 1790. The period may be divided into (a) Tudor or Elizabethan, the period of transition from medievalism; (b) Stuart or Jacobean, the climax, which begins with Inigo Jones and ends with Wren; (c) Hanoverian or Georgian, the period of decline.

TUDOR OR ELIZABETHAN PERIOD. This was an age of transition from Gothic to pure classical architecture. It coincides fairly closely with the sixteenth century; and is exemplified in the great houses of the nobility, so many of which were built at this time, especially in Elizabeth's reign. Very little church work was done. The general disposition of a building is medieval: a skyline broken with many chimneys, gables, and turrets; wide square-headed windows, with mullions and transoms; numerous oriel windows. But the walls are often covered with classical pilasters and entablatures, and the doorways and fireplaces were enriched with classical compositions. These details are thought by some to have been generally executed by foreign workmen, Italians at the beginning of the sixteenth

century, and afterwards by Germans; others consider them to be the work of Englishmen. The wall is often finished with a parapet pierced with a sort of tracery known as strap-work, more Gothic than classical in feeling. The rooms are panelled in small square panels with minute mouldings, and the ceilings are decorated with plaster-work in relief.

The half-timber houses are picturesquely treated, and are decorated with fantastic carvings or with modelled plaster-work. In the general plan of the large houses as well as of the small there is a tendency to abandon the courtyard and to adopt an E-shaped figure.

STUART PERIOD. This period coincides closely with the seventeenth century and with the Stuart dynasty, for it may be said to begin with the first appearance of Inigo Jones as an architect in 1610 and to end in 1701 when Wren had finished the bulk of his work. Inigo Jones revolutionised English architecture. He brought back from Italy a thorough knowledge of classical architecture as practised by Palladio and other Italian architects; he discarded the lingering Gothic traditions and the straggling medieval plan (fig. 201). He was the first English architect in the modern sense of the word, that is to say, he was the first to design buildings from beginning to end without taking upon himself in addition the duties of builder or clerk of works or general supervisor and accountant.

The Classical Orders* are now used for the first time with discrimination and restraint. Sometimes each storey is marked by a separate order in which case the most substantial, the Doric or Tuscan, is placed lowest, the Ionic or Composite next, and the lightest, the Corinthian, at the top. Often two storeys are included in one order. In either case the lowest storey, especially if not the most important, may be treated as a podium* and rusticated.* When arches are used they spring from

* See article thereon.

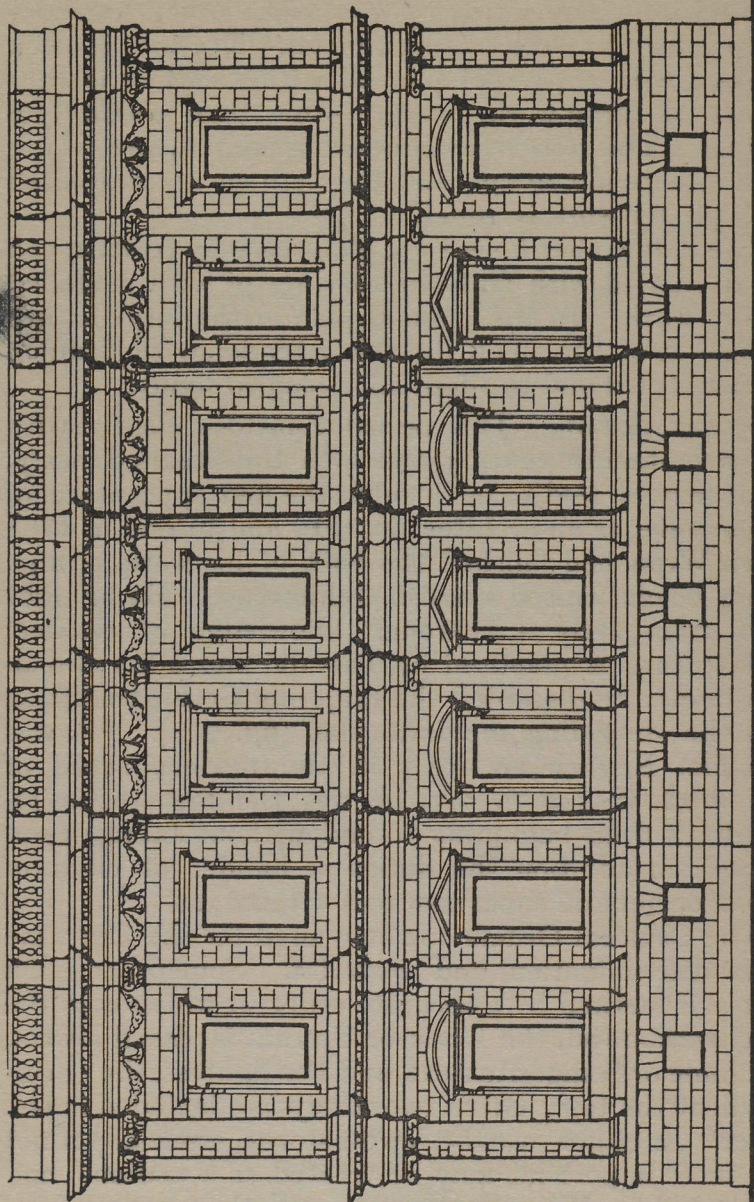


FIG. 201. BANQUETING HOUSE, WHITEHALL

pilasters between the main columns, though in some cases it was permissible to let them spring from the entablature of a main order. They are invariably round, and generally have a projecting keystone, either plain or shaped like a corbel to support the entablature. The 'flat-arch' is very commonly used over windows in rusticated stonework and in brickwork. The vaulting is quadripartite in square bays and has no ribs. Windows are high and narrow, sometimes arched but usually square-headed; the jambs and head have the usual architrave moulding*; there is sometimes a complete entablature, with or without a pediment, over the head. Large windows are divided into three lights; the side lights are narrow and are covered by an entablature, the central light is wide and arched; these are called Venetian windows. Doorways are made to correspond. Ceilings are often enriched with elaborate plaster-work* on a large scale. The framework of the roof never shows internally. In the more correctly classical buildings the roof is low-pitched and as it is almost always hipped there are no gables except where a pediment is required for architectural effect. The simpler buildings often have steep roofs with curved gables,* and overhanging eaves instead of a balustrade (fig. 92). In the latter part of the seventeenth century the 'mansard roof' was introduced from France. Panelling is now on a large scale, the mouldings are mitred at the angles and sometimes bolection mouldings are used.

While Palladian architecture was at its height a sort of picturesque Gothic, called 'King James' Gothic,' was still occasionally used, especially in churches, and was continued till the Civil War.

HANOVERIAN. The work of the eighteenth century does not differ from that of the seventeenth so much

* See article thereon.

in the use of new forms or new combinations, as in a general deterioration in the quality of the design. Wren was not appreciated by his pedantic contemporaries who aimed at what they considered greater correctness. Architecture became a fashionable amusement for the gentleman of leisure. About the middle of the century Chinese and other exotic fashions began to appear, and soon afterwards the publication of Stuart and Revett's *Antiquities of Athens* introduced for the first time a knowledge of Greek architecture, the taste for which soon became a mania. At the same time or soon after there began that revived taste for Gothic art, which was to engross the talent of the nineteenth century.

RERE-ARCH. *See* ARCH.

REREDOS (tautological, from Middle English *rere*, rear, back, and Fr. *dos*, from Lat. *dorsum*, back—s. Cf. *dossal*). A wall or screen of stone or wood with sculptured or coloured decoration behind an altar. A large medieval reredos was perhaps most often of the elaborately sculptured type, containing subjects from Scripture or legend with many single figures of saints in niches or tabernacles, as at Winchester. Many small churches contained sculptures in stone or alabaster in a simple architectural framework. These sculptures were no doubt invariably coloured. Other churches had pictures painted on stone or on wood like those at Westminster and Norwich; these were called 'tables.' A 'table with leaves' was what is now called a triptych, a painted wood panel with folding leaves. Frequently instead of a reredos there was a *dossal*.*

RERE-DORTER. A necessarium.*

RESONATOR. In some medieval churches a row

* See article thereon.

of large earthenware jars has been found under the choir stalls. These jars have been called resonators or acoustic jars because it is supposed that their object was to increase the sound of the singing.

RESPOND. A half-column terminating an arcade.

RETABLE. A name apparently modern, given to the shelf at the back of an altar* on which are placed the cross and candlesticks.

RETABULUM. This name has been given to a painted wood reredos.*

RETAINING-WALL. A wall which supports a terrace of earth.

RETICULATED TRACERY. *See* TRACERY.

RETRO-CHOIR. That part of the choir which is behind the high altar.

RETURN. A change in the direction of any continuing or repeating object; for example, a cornice returns at the angle of a building; in a chancel where there are stalls against the side walls, and two or three more stalls against the screen facing east, the stalls are said to be 'returned,' and those against the screen are called 'return stalls.'

REVEAL. The surface between the outer face of a wall and the frame of a door or window.

REVESTRY. *See* VESTRY.

RIB. The narrow arch on the groin or on the surface of a vault* or a similar member at the ridge; the narrow mouldings on a panelled wood ceiling.

RIDEL. A curtain projecting from the wall at each end of an altar.

* See article thereon.

RIDGE. The angle at the apex of a roof; tile roofs are covered with a ridge-tile made for the purpose and often of a decorative character.

RINGING GALLERY. The west tower of a church often has a gallery for the ringers about twelve feet from the floor; they are common in Norfolk.

ROCOCO (Fr. *rococo*, from *roc*, rock-work). A style characterised by a peculiar grotto-like style of ornament, in vogue during the reigns of Louis XIV. and Louis XV.

ROMAN ARCHITECTURE. The Romans adopted the architectural forms of the Greeks, that is to say they adopted the three Greek orders,* Doric, Ionic and Corinthian. On these they made variations; one form of their Doric we call Roman Doric, another Tuscan. Their Ionic did not vary very much from the Greek, but they made a curious compound of Ionic and Corinthian which is called Composite, but is really a form of Corinthian with volutes borrowed from the Ionic capital. The Corinthian was their favourite order and the one with which they were most successful.

In Roman architecture the column and entablature are often used structurally, as the Greek had used them. But in many buildings, such as the Colosseum, they are merely decorative and are attached to a wall which is pierced with arches. In buildings of this class consisting of several storeys, one order is used as a decoration for each storey, the entablatures marking the levels of the several floors. The arches usually spring from low pilasters placed against the main columns and the entablature passes over them. The same system is followed in the triumphal arches, like that of Titus, where the arch played a still more important part.

* See article thereon.

The arch in one form or another was used with great boldness and became the really dominant feature in Roman architecture. Vaults of immense size like those of the Basilica of Maxentius at Rome and domes like that of the Pantheon and the long arched aqueducts which supplied the city with water, are the buildings in which the Roman shows his strength.

The Roman was essentially an engineer; his art was always coarse and was often brutal. His greatest successes after his purely utilitarian works were probably the vast complex buildings, such as the baths and palaces and the many-columned basilicas or public halls. He was a first-rate planner. He had an extraordinary knowledge of materials, and his mortar and concrete have become almost proverbial. His appliances for warming his houses, for draining them and for supplying them with water and making them generally comfortable were wonderful. His power as an engineer lay in these directions and in the splendid strength of his construction, for it is doubtful if he had inventive genius even as an engineer, and he had not to deal with the nicely opposed thrusts and the slender frame of Gothic construction.

ROMANESQUE ARCHITECTURE. The architecture in England and on the Continent in which the influence of Roman buildings and tradition is seen; our Norman* is one phase of it.

ROOD (the same word as rod). The Cross. The early Christians used the cross as a symbol,* but it was without the figure of Our Lord, and they never represented the scene of the Passion. In the earliest crucifixes the figure is draped in a long plain coat and the arms are horizontal; it is only in later times that the attitude becomes more natural and the treatment generally more realistic. It was then generally large,

* See article thereon.

often life-size, and was probably coloured more or less naturally; figures of the Virgin and St. John, with angels, were often placed on either side.

No example of a great sculptured crucifix remains in England, but there are extant some painted roods and there are several contemporary descriptions.

ROOD - LOFT AND SCREEN. In the earliest churches* the presbytery or chancel* had been separated from the nave by a screen. Through all the changes in church arrangement this separation was kept. It survived in very many places the Reformation and the reign of Puritanism, and in not a few was only removed in the eighteenth or nineteenth centuries. Screens are still fairly common; they are most numerous in the eastern counties and in Devonshire. The lower part is always panelled, the panels being often painted with figures of saints. The upper part is open, with mullions and tracery, which were also decorated with colour. There is a wide opening in the middle fitted with folding doors.

The erection of a loft or gallery on the top of the screen was probably a development of comparatively late times (P. says the fourteenth century or later). The loft of a parish church is not the same thing as the *pulpitum** of a cathedral or conventual church, but it was suggested by it and served some of the same uses (M.). On it was placed the representation of the Passion. It was often large enough to contain also the small organs of the period and a number of singers. It has been thought by some that the epistle and gospel were read from the rood-loft, but this seems doubtful. The loft was reached by a small staircase contrived in one of the piers of the chancel arch or built purposely in a turret; this staircase with its upper and lower doors generally remains.

* See article thereon.

In some large churches the screen and loft extended across the aisles as well as the nave. In a small aisleless church altars were placed against the screen on each side of the doorway.

There are a number of rood-lofts extant in fairly perfect condition, chiefly in Wales and the West of England. Under the projection of the loft there is generally a cove or vaulting, above which there is a rich cornice and a piece of panelling forming the front of the gallery. It seems that the loft itself was sometimes called the 'candle-beam'; in other cases the candle-beam is the beam on which the rood and figures stood, and on which were placed numerous lights from which it derives its name.

In many churches the chancel arch was partly or entirely filled with a tympanum* of boarding. On this was painted the whole scene of the Passion or accessories to the figures which stood on the loft; in other instances there was a picture of the Last Judgment.

ROOF. So far as regards construction roofs may be conveniently divided into two classes, namely, open timber roofs in which the constructive timbers are visible from below and are, therefore, of a more or less decorative character; concealed roofs, below which there is a ceiling,* consisting either of an independent vault, or of boarding or plaster either flat or arched or of any other form, attached to the timbers of the roof. Some roofs partake of the characteristics of both classes.

The open timber roof was the form most commonly used in England throughout the middle ages for churches, halls and other large one-storeyed buildings. It is a peculiar characteristic of English architecture and was gradually developed into very elaborate and

* See article thereon.

beautiful forms. On the Continent, from the comparative scarcity of good timber and from other causes, it was little used and stone vaulting was far more common.

Of Norman roofs few, if any, remain; they probably resembled those of the thirteenth century, of which there are a fair number of examples. These belong to

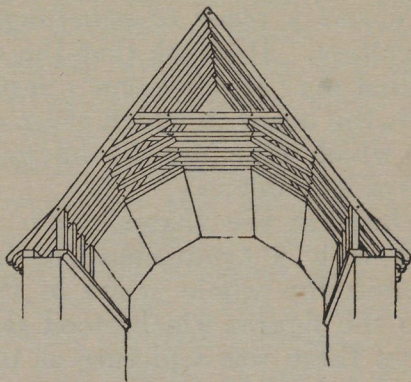


FIG. 202. TRUSSED-RAFTER ROOF, PARTLY CEILED

the class known as trussed-rafter roofs, that is, each pair of rafters is framed together by a system of ties and struts so as to form a complete truss in itself (fig. 202). In later roofs the rafters are not so framed, but were strengthened by purlins, carried on framed trusses or principals, placed at considerable intervals. The two methods are at this period often combined in a somewhat unscientific way, by using a rudimentary principal in a trussed-rafter roof (fig. 203). There are no principal rafters; the principal truss consists of a very strong tie-beam, on the centre of which stands a post cut into the form of a column, with capital and base. This column supports a central purlin. The purlin helps to support the collars which stiffen the rafters. The purlin, therefore, gives but an indirect support

to the rafter, and any weight which the tie-beam carries comes upon the very middle of it. The heavy tie-beam is, however, of use in tying in the wall-plates, and thus preventing the rafters from spreading and pushing out the walls. The central post is sometimes

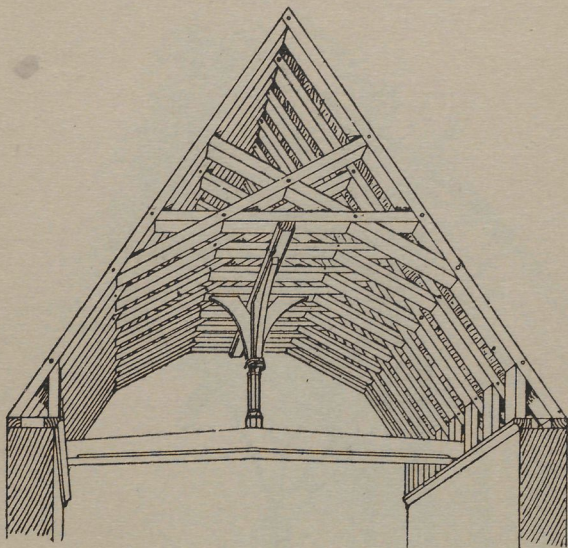


FIG. 203. TRUSSED-RAFTER ROOF, WITH RUDIMENTARY PRINCIPAL

called a king-post; it must not be confused with the modern king-post, which hangs from the ridge and supports the middle of the tie-beam (fig. 209).

The simple trussed-rafter roof had very frequently, perhaps more often than not, a ceiling either of boarding divided up into panels by small ribs, or of plain plaster, attached to the struts and collars and thus forming a polygonal barrel. Each side of the polygon is called a 'cant,' whether there is a ceiling or not; thus the roof shown in fig. 202 is said to be of seven cants.

In the fourteenth century the trussed-rafter roof continues to be used, but roofs with framed principals and purlins become much more common. The principal truss has generally an arched form which exerts a considerable thrust on the walls (fig. 204); this thrust is, however, reduced as much as possible by making

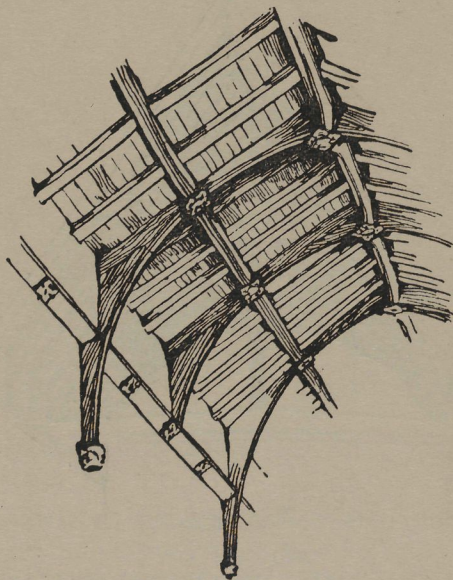


FIG. 204. FOURTEENTH-CENTURY ROOF

the arched struts spring from corbels a good distance below the top of the wall. When the principals are far apart intermediate principals of a slightly different form are used (fig. 204), or the purlins and ridge are strengthened by wind-braces or struts springing from the sides of the principal rafter (fig. 205).

About the middle of the fourteenth century an important modification was made. The arched strut of the principal instead of resting on the wall springs from a horizontal bracket called a hammer-beam, resting on the top of the wall and supported by a curved

strut; hence this form of roof is called a hammer-beam roof (fig. 206). The bracket supports a vertical post placed under the principal rafter at the point where the weight of the purlin comes. The weight of this post is counteracted, partly by the weight of

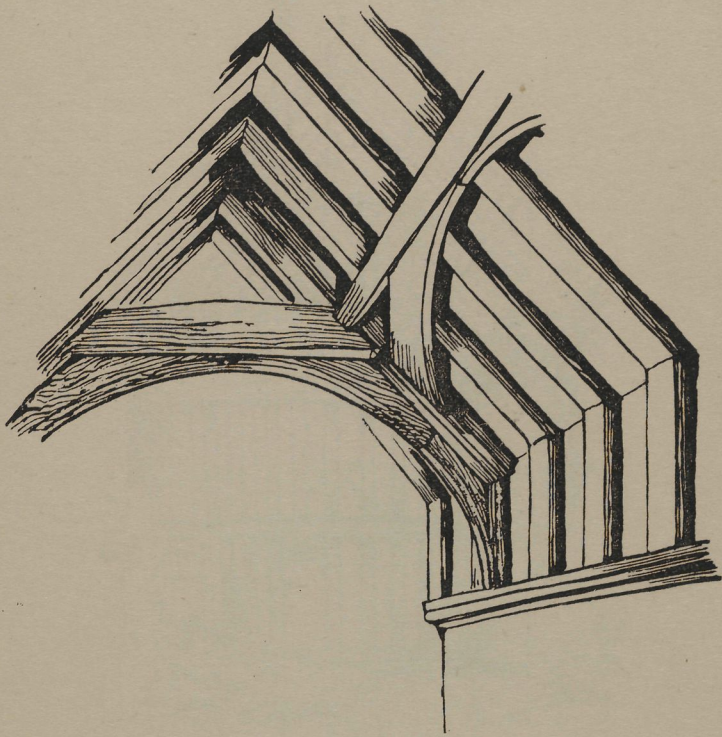


FIG. 205. ROOF WITH WIND-BRACES, CONWAY CHURCH

the principal rafter, which rests on the other end of the hammer-beam, and partly by a strut under it, springing from a corbel some way down the wall. The upper part of the principal is strengthened by a collar or by another hammer-beam and post, or by curved struts, forming an arch with its apex quite close to the ridge. The hammer-beam is sometimes carved

into the form of an angel, or an angel stands upon it in front of the vertical post. The spandrels above and below the hammer-beam are generally filled with rich and delicate tracery. This form of roof lends itself to many variations and to a highly decorative treat-

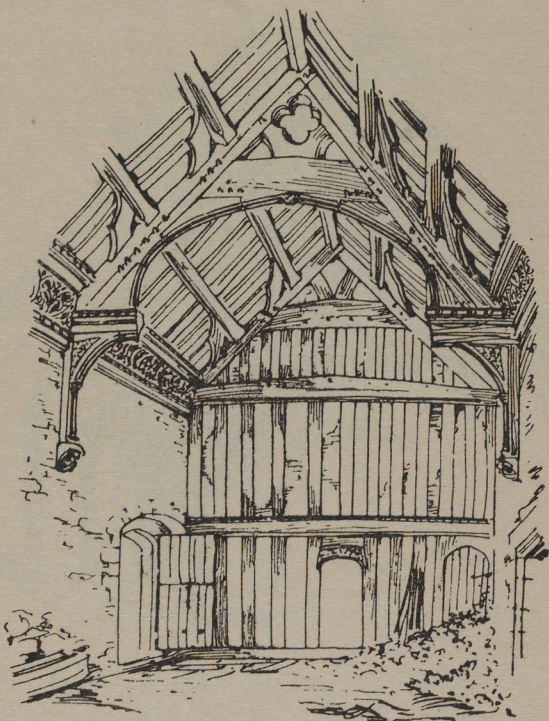


FIG. 206. HAMMER-BEAM ROOF, COCHWILLAN

ment. The finest and also the best-known example is that of Westminster Hall, 1397. The hammer-beam roof continued throughout the fifteenth century and was occasionally in use till the beginning of the seventeenth century; but as architecture declined in the latter half of the fifteenth century it was to a great extent superseded by nearly flat roofs. In these

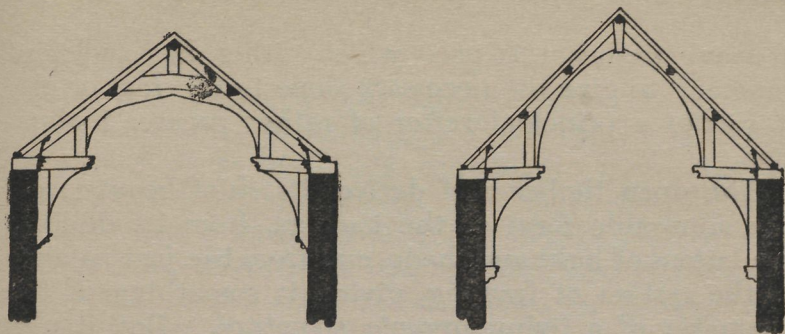


FIG. 207. HAMMER-BEAM ROOFS

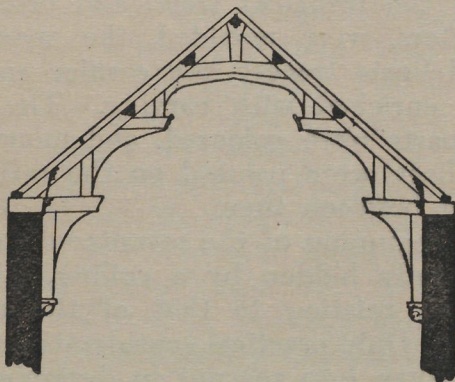


FIG. 208. DOUBLE HAMMER-BEAM ROOF

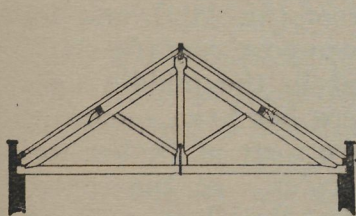


FIG. 209. KING-POST ROOF

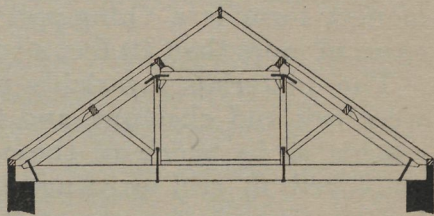


FIG. 210. QUEEN-POST ROOF.

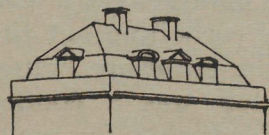


FIG. 211. MANSARD ROOF

a heavy tie-beam is used which either has sufficient camber* to give the necessary slope to the roof or else it carries a principal rafter of rather greater inclination.

The open timber roof derives its chief beauty from the admirable form of the timbers, from its delicate gradations of light and shade, and from the just balance in the system of framing, giving it something of the character of a living organic structure. But it also received other decorations of form and colour. The members of the principal truss, and often also the common rafters, were moulded, the spandrels were filled with delicate tracery, the cornice and hammer-beam were enriched with carving. The mouldings and other parts were coloured, and monograms and sprays of foliage were painted on the rafters and on the boarding between them.

From the beginning of the seventeenth century the roof is generally hidden by a ceiling,* the form of which has no relation to that of the roof and is generally flat. Only practical considerations, therefore, have to be taken into account in designing the roof. For roofs of from 25 feet to 40 feet span the commonest form is a 'king-post' roof (fig. 209), and for spans of more than 40 feet a 'queen-post' roof (fig. 210).

The materials invariably used in the middle ages were oak and chestnut, and there has been some discussion as to which of these two sorts of timber was employed in still existing examples. In the seventeenth century the use of foreign deal became more common and is now practically the invariable rule. Occasionally in the middle ages a small roof was made entirely of stone by corbelling out the courses till they met at the ridge, the structure being strengthened by arched ribs. Thatch was a common, probably the most common roof-covering for mediæval houses both

* See article thereon.

in town and country; for churches and for the greater houses tiles were generally used. Roofs were covered with lead even in Norman and Saxon times; in many fifteenth-century churches the pitch is too flat to admit of any other material. In some parts of the country, e.g. Gloucestershire and Northamptonshire, thin slabs of stone were and still are used like slates, but slates do not seem to have been in general use till the latter part of the seventeenth century, when thatch becomes less and less common.

In the latter part of the seventeenth century a new sort of roof was introduced from France, called a Mansard roof, after the inventor. The lower part of the roof is steep pitched and the upper part much flatter. Both slopes are slated or the steep part covered with plain tiles and the flat part with pan tiles. This sort of roof was the result of planning buildings in square blocks, which became common in the seventeenth century; these would have required a roof of great height if one of ordinary construction had been used. Sometimes such a building is covered by a number of small roofs which are concealed behind a high parapet, but these do not afford space for garrets as does the Mansard.

The following are the most common terms in use. *Span*: the clear space between the opposite walls. *Span-roof*: one which has a central ridge. *Lean-to roof*: one which has only one slope, generally placed against a higher building, e.g. over the aisle of a church. *Pitch*: the angle the roof makes with the horizon. *Hipped roof*: one which does not terminate in a gable, but in a slope like the sides of the roof; the angle formed by the meeting of two slopes is called a hip. *Valley*: the line of intersection where one roof joins another.

ROSE-WINDOW. A name sometimes given to a large circular window filled with tracery. (*See also* CATHERINE-WHEEL WINDOW, TRACERY.)

ROUGH-CAST. A rough plaster used for covering the outsides of buildings, made with lime and gravel and thrown on to the wall.

RUBBLE. Masonry of unshaped stones.

RUNIC CROSS, RUNIC PATTERN. The early crosses (generally covered with interlacing patterns) found in Ireland, Wales, Iona, etc. They are Celtic or derived from Celtic work. So called from *rune*, one of the old characters used for incised inscriptions (s.). The elaborate interlacing patterns are believed to be derived from wicker-work. They continued in use into Norman times.

RUSTICATION. Masonry in which the beds and joints are squared but the faces of the stones are left rough. The term is also applied to the following variations on this treatment: the stone is worked to a true surface, projecting slightly beyond the face of the wall, and is then artificially roughened; the stone is worked to a smooth projecting surface and the edges are chamfered, rebated or moulded. Rustication is used chiefly in the basement storey to give an appearance of strength.

SACKERING BELL. *See* SANCTUS BELL.

SACRARIUM. *See* SANCTUARY.

SACRISTY. The sacrist's room or vestry*; a room in or attached to a church, in which were kept the vessels belonging to the altar, the vestments and other ornaments. It stood generally on the north side of the chancel, and often contained an altar. Sometimes there was a chamber over it, and occasionally a charnel-house* or place for bones below.

SADDLE-BACK COPING. A coping which rises to a sharp ridge like a roof.

* See article thereon.

SADDLE-BACK ROOF. The roof of a tower which has a ridge and terminates in gables instead of being of the usual pyramidal form.

SADDLE-BAR. A horizontal iron bar placed across a window partly for the purpose of securing the glass and partly to prevent persons from entering the building through the window.

SALIENT. An angular projection from a castle* wall, commanding a length of wall on each side of it.

SALON, SALOON. A large state apartment in a palace or great house.

SANCTUARY, SACRARIUM. (1) A chancel; the east part of a chancel. (2) The precincts of a church, including the churchyard, which gave protection to a fugitive criminal. While he remained there the culprit could be watched to prevent his escape, but he could not be molested. If he chose to confess his crime he was given a definite time in which to make his way to the nearest port and to leave the country. Particulars of the way in which anyone 'taking sanctuary' was received at Durham are given in the *Rites of Durham*. (See also FRITHSTOOL.)

SANCTUS BELL, SACKERING BELL. A bell rung at the consecration of the Host. Sometimes a small hand-bell; sometimes a larger bell hung in the bell-cote over the chancel arch.

SARCOPHAGUS. A stone tomb. 'Made of limestone which was supposed to consume the corpses (Pliny); from the Gk. *σαρκοφάγος*, flesh-consuming' (s).

SAXON ARCHITECTURE. The architecture of England from the time of the settlement of the Saxons to the Norman Conquest. It seems to have been in-

* See article thereon.

fluenced to some extent by the buildings which the Romans had left in England, and Roman materials were re-used. The construction was at first good, and it was therefore possible to make the walls thin. In the eleventh century, after the devastation wrought by the Danes, the quality of the work deteriorated (M.). No buildings other than churches now remain. The houses were doubtless almost invariably of wood and so probably were many of the churches.

Saxon towers are usually tall and thin. They are divided into stages of about equal height by a series of off-sets, each stage being rather narrower than the one below it (fig. 212). The belfry windows have a strongly marked character of their own. They are divided by baluster-shaped columns set in the middle of the wall and supporting a long stone running from inside to outside to carry the arches. Thus the Saxon towers strongly resemble those of the early churches in Rome, by which they were no doubt largely influenced. They were probably surmounted by a low pyramidal spire of stone or wood, or by a roof with a gable over each face of the tower. The baluster-shafts were copied from Roman

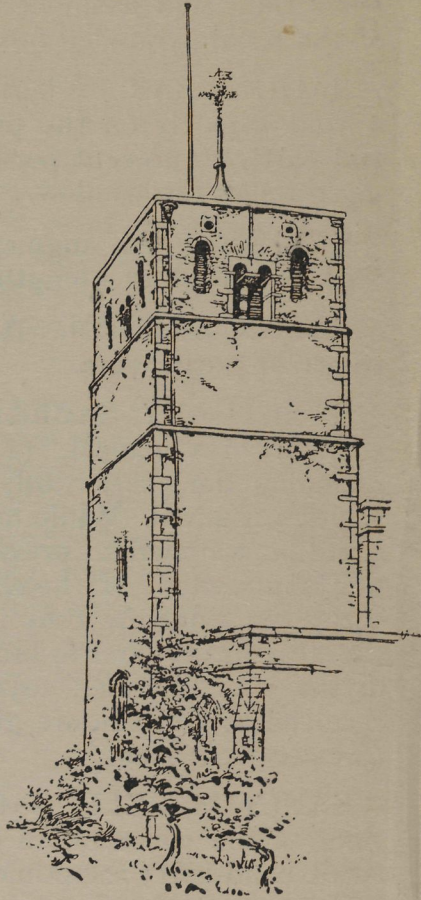


FIG. 212. SAXON TOWER, ST. BENET'S,
CAMBRIDGE

work and were used in other parts besides the towers. Arches are always round and of a single order* or ring. Door jambs are not splayed or rebated. Windows are small, and in early churches are splayed on the inside (fig. 213 *a*). They are sometimes complete circles.

It is in the inferior buildings of later times that those features which are so readily recognised as Saxon are found. The angles are built in 'long-and-short'* work (fig. 212), whereas in the earlier buildings they had been done in the usual way; windows

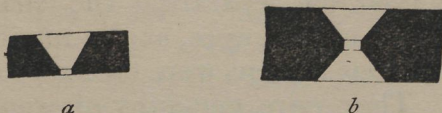


FIG. 213. PLANS OF SAXON WINDOWS

are splayed outside as well as inside so that the opening is narrowest in the middle of the wall (fig. 213 *b*); the head of a door is sometimes a triangle formed by two stones leaning against one another; capitals are rudely sculptured or moulded; barrel vaults are used over small spans. A remarkable and curious feature is the pattern formed on the face of a wall by narrow vertical strips of stone, with some diagonal and arch-shaped pieces. It is rather suggestive of wood-framing and is by some thought to be derived from timber buildings; it is probably a Danish feature (w.). Others maintain that the system is a rude imitation of the pilasters and entablatures of the Romans.

The walls were plastered inside and outside. Roofs were probably covered with thatch or oak shingles. Glass was not unknown but was rarely used.

SCAGLIOLA. "A species of plaster or stucco invented at Carpi in the state of Modena by Guido Sassi, between 1600 and 1649. It is sometimes called *mischia*, from the mixture of colours introduced in it.

* See article thereon.

It was not, however, till the middle of the eighteenth century that the art of making scagliola was brought to perfection" (G.).

SCALLAGE, SCALLENGE. A term used in Herefordshire and the west of England for a lichgate (G.).

SCANTLING. The dimensions of a piece of timber in breadth and thickness.

SCOTIA. *See* MOULDING (fig. 182).

SCREEN. (1) In the earliest Christian churches* screens were used for separating the chancel* from the nave. In the middle ages, as the number of altars increased, numerous screens were erected to form separate chapels. They were generally of wood but sometimes of stone and occasionally of iron. In the ordinary parish church the evidence of five screens is almost invariably to be seen, namely, the rood-screen* cutting off the chancel, a screen under the easternmost arch of each aisle, and a screen crossing each aisle from the easternmost column thus forming an enclosed chapel at the end of each aisle. The lower part of these screens was filled with boarding; the upper part had mullions and tracery. (2) The lower end of the hall in a medieval house* was crossed by a screen, forming a passage between the two opposite doors. It would seem that at first there were two short screens called 'spurs' projecting from the side walls of the hall, a third screen was then placed between them; finally doors were fitted in the openings, and a floor built from the screen to the end wall of the hall, forming a gallery over the passage, which passage itself came to be called 'the screens.' (3) A stone colonnade in front of a building, forming a sort of fence, is sometimes called a screen. This is more common in Renaissance architecture than in Gothic.

* See article thereon.

SCULPTURE. The word is commonly limited to representations of the human figure to the exclusion of the carving of foliage.* It will be taken in this sense here, and it will, moreover, be considered only in its application to, or association with architecture.

The earliest remaining sculpture of which we shall take account here—the Saxon and early Norman—is almost always in relief; early sculpture completely in the round is rare. The relief is shallow and there is little or no modelling; indeed the subject is almost entirely on one plane. Low relief is susceptible of the highest possible artistic treatment, but almost everything depends on the most delicate modelling of the surface. Early sculpture however is not, strictly speaking, modelled at all; the outline is very distinctly shown against the background, and the rest of the form, such as the features and folds of the drapery, is indicated by incised lines. But the design, though rude, is vigorous and is well composed to fill the required space. Most of the remaining examples are figures in niches and subjects in the tympana of doorways.

The art made extraordinary progress during the latter part of the twelfth century, and the work of the second quarter of the thirteenth century is very fine. There are some good monumental effigies of that period in stone and in Purbeck marble. The figures still have some archaic stiffness and the attitudes are occasionally strained. But the work continues to improve, and in the latter part of the thirteenth century it is particularly beautiful, the attitudes have a simple grace and the expression of the features is very sweet. This is perhaps the greatest period of sculpture as applied to building, for the Greek simplicity of the drapery harmonises perfectly with, and seems to form

* See article thereon.

part of, the architecture. The bronze effigy of Queen Eleanor on her monument in Westminster Abbey and the figures in stone on the Eleanor monuments are the most famous examples of this period.

In the fourteenth century some of the early mannerisms are dropped, such as the conventional treatment of the hair and the peculiar and at the same time beautiful modelling of the lower eyelid. The work is less idyllic and the expression less cheerful. The portraiture of the individual becomes much more pronounced. This is analogous to the natural foliage of the period. There is no attempt at portraiture in the Eleanor monument, but the figure of Queen Philippa is clearly a good likeness. The principal effigy of a monument and the statuettes in the niches round it are simply and very beautifully treated.

The Purbeck marble used for the sepulchral effigies of the thirteenth century was abandoned. Figures were carved in stone or marble or wood, others were of wood overlaid with metal, either silver or copper, and a few were cast in bronze.

In the fifteenth century there is a still further advance to naturalness of attitude and individuality of feature. The drapery is not so simple and the whole treatment is richer and more elaborate. Subjects, as in the great reredoses at Winchester Cathedral and Christchurch, Hampshire, are treated in high relief and on a bold scale.

The work at this time varies very much in quality. Many examples are careless and clumsy. A great number of small alabaster reredoses, for example, were turned out presumably at 'popular' prices from the works in Nottinghamshire and Derbyshire. These, like all the work of this and of the previous century, with doubtless much of the thirteenth century, were coated with a fine layer of plaster and richly coloured.

The Reformation of course killed architectural sculpture as completely as it killed mural painting, and it has never been used on a large scale since. Monumental effigies of the reigns of Elizabeth and James are often finely conceived and dignified in pose, but the artist was seriously handicapped by the costume of the time.

In later Renaissance—the work of Inigo Jones and of Wren—figures of saints are occasionally placed in niches, but more often Justice, Science and so forth, recline on the slopes of the pediment or stand on the pedestals of the balustraded parapet. “The Statues,” says Wren in his description of one of his designs, “will be a noble ornament, they are supposed of plaister, there are Flemish artists that doe them cheape” (w. & c.). Evelyn, Wren’s contemporary, has some interesting remarks about medieval sculpture:—

“When we meet with the greatest Industry and expensive *Carving*, full of *Fret* and lamentable *Imagry*; sparing neither of Pains nor Cost; a Judicious Spectator is rather Distracted and quite Confounded, than touch’d with that Admiration, which results from the true and just *Symmetrie*, regular Proportion, Union and Disposition; Great and Noble manner, which those *August* and Glorious Fabrics of the *Antients* still Produce.” (Evelyn: *An Account of Architects and Architecture*.)

SEDILE (*pl.* SEDILIA). A seat, especially one for clergy on the south side of the chancel. This is a survival of the stone bench which ran round the apse in early churches (M.), and there are some examples of early sedilia which retain the form of an ordinary bench terminated by a massive stone arm-rest (fig. 214). The medieval sedilia are recessed and consist of three seats, “except in great ‘quires,’ where they were generally four” (M.), and in a few

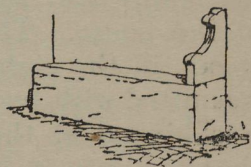


FIG. 214. EARLY FORM OF SEDILE

examples which have only two seats. The seats were arranged at three different levels corresponding to three steps in the floor. The recesses are arched and sometimes elaborately treated and the piscina* is often included in the same architectural composition. In small plain churches the sedilia is sometimes formed by carrying down the recess of a window.

SEPULCHRAL MONUMENT. *See* MONUMENT.

SEPULCHRE, EASTER. *See* EASTER SEPULCHRE.

SET-OFF. *See* OFF-SET.

SEVERY. *See* BAY.

SGRAFFIATO-WORK, SGRAFFITO-WORK. (Ital. *sgraffiato*, scratched). A method of wall decoration effected by putting on a coat of coloured plaster and then a coat of white plaster; parts of the second coat are then scratched off showing the coloured coat underneath. By this means a design in two flat colours can be easily carried out.

SHAFT (Anglo-Saxon *scafan*, to shave, from being shaved smooth—s. Cf. shaft of a spear or arrow). A column* excluding the capital and base and annulet.

SHINGLE (Lat. *scindere*, to cleave—s.). A tile made of split oak; frequently used on roofs in the middle ages.

SHIP. *See* INCENSE SHIP.

SHOP. The medieval shop was a place where goods were made as well as sold, and the master with his family and apprentices lived in the upper storeys of the house. The building was almost invariably of wood till the eighteenth century. The shop window was fitted with two folding shutters; the lower of these was hinged at the bottom, and was let down during the day into a horizontal position to form a table

* See article thereon.

standing out in the street, on which were exhibited objects for sale; the top shutter was hung by its upper edge, and was raised to form a pent-house roof to shelter the stall. "With your hat pent-house like o'er the shop of your eyes," says Moth, in *Love's Labour's Lost*. The door was like the stable door of the present day. This sort of shop front was general till the first half of the eighteenth century, when glass windows were gradually introduced.

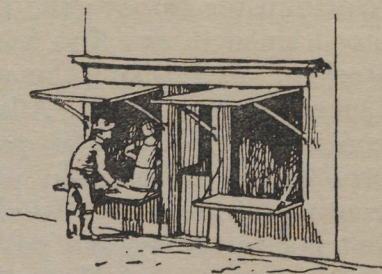


FIG. 215. MEDIEVAL SHOP
NORTH ELMHAM

SHRINE (Lat. *scrinium*, a chest, box—s). A sepulchre to contain the relics of a saint, generally erected behind the high altar in a cathedral or monastic church. A shrine of the first class consisted of "at least four distinct parts: (1) the stone basement, at the east [or west] end of which was (2) the altar. The use of the stone or marble basement, which was frequently perforated with small niches, was to support (3) a wooden structure covered with plates of gold or silver, and often enriched with jewels and enamels. In order to preserve the precious metals from the atmosphere, and at the same time to cover up the feretory, as the top part was called, when it was not desired to show it, there was (4) the cooperulum, or a wooden covering, suspended from the vaulting above by ropes, and lifted by means of a counterpoise. Shrines of lesser dimensions were kept in all sorts of places, such as above and within altars, and were moreover often carried in procession." In the niches of the basement, mentioned above, "sick people were frequently left during the night, in the hopes of a cure being effected by the intercession of the Saint" (BU.).

The only shrine in England of which any part re-

mains undisturbed is that of Edward the Confessor in Westminster Abbey; the basement is believed to have stood since it was first built by Henry III.; it is the work of an Italian; the upper part is of the time of Queen Mary. At St. Albans there is the thirteenth-century shrine of the patron saint recently reconstructed in its original place. At Ely the fifteenth-century shrine of St. Etheldreda had been re-erected, but not in its original position. At Canterbury there are no remains of Becket's shrine, but its position is known and the old pavement is worn by the pilgrims who visited it.

SHRIVING-PEW. *See* CONFSSIONAL.

SKIRTING. A low plinth or base, generally of wood, placed against the walls of a room because it offers a better resistance to injury than plaster.

SOFFIT. The under side of a cornice, lintel, arch, staircase, etc.

SOLAR. (prob. from Lat. *solarium*, a part of the house exposed to the sun, a balcony). A loft or upper chamber, a rood-loft (occasionally); especially the upper chamber reserved for the private use of the family in a medieval house.*

SOMMER. A principal beam in a floor or partition into which smaller joists of studs are framed. Rare. (*See* BREAST-SOMMER.)

SOUNDING-BOARD. A wooden canopy, generally flat, over a pulpit.* The earliest examples are of the seventeenth century; they were common then and in the eighteenth century. (*See* TYPE.)

SPAN OF A ROOF OR ARCH. The clear space between the supporting walls or piers.

SPANDREL. A space enclosed between the extrados of an arch and some rectangular lines such as a

* See article thereon.

label, or between an arch and its foliation, or other triangular area such as the surface of a vault between two adjacent ribs.

SPIRE. The tapering roof of a tower, turret or pinnacle as distinct from the tower itself; the word steeple includes both tower and spire. (*See STEEPLE.*)

SPITAL. The medieval abbreviation of hospital.*

SPLAY. A large chamfer*; a surface which is oblique to the general wall surface, as the splayed jamb of a window.

SPLOCKET, SPROCKET. A piece of wood nailed on to the foot of a rafter and overhanging the wall, so as to form a projecting eaves to the roof (fig. 216).

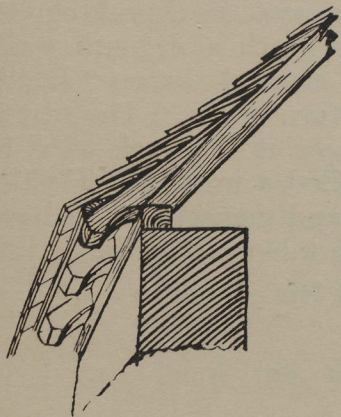


FIG. 216. SPLOCKETS

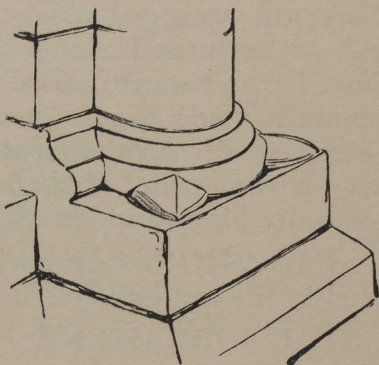


FIG. 217. NORMAN BASE WITH SPURS

SPUR. When a circular base* of a column stands on a square or octagonal plinth the spandrel* is often filled by a spray of foliage, a tongue or a grotesque, called a spur, particularly in work previous to the middle of the thirteenth century (fig. 217).

The screen* of a medieval hall was sometimes called the spur.

* See article thereon.

SQUINCH. An arch or lintel built across the angle of a tower to carry the side of an octagonal spire (fig. 218).

SQUINT. A small loophole cut obliquely through a wall or pier in a church to allow a view of the high altar; they seem not infrequently to have been arranged for the convenience of the lord of the manor who occupied a transept as a private pew.

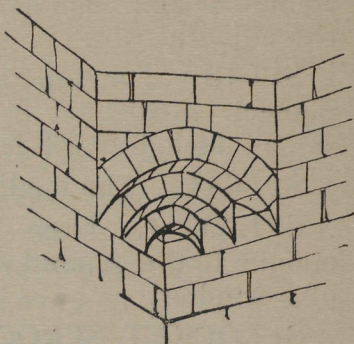


FIG. 218. SQUINCH ARCH

STAINED GLASS. See GLASS.

STALL. A seat separated by arms from others adjoining it; used especially of seats in church choirs. They are arranged along the north and south walls and are returned along the chancel screen; hence those facing east are called 'return* stalls.' The seat is generally made to rise on hinges at the back so as to form a small elevated seat called a miserere* for the ease of the aged. Cathedral and monastic stalls have generally high canopies of rich tabernacle work.

STANCHION. An upright bar of iron in a window fixed to the saddle-bars.*

STAR ORNAMENT. An enrichment used in Norman* architecture.

STEEPLE. A tower including any superstructure whether spire or lantern; the term seems to have been used for church* towers only; it is now less common, but is still used in the villages.

Saxon towers were usually tall and thin; they had no buttresses and were divided into well-marked stages by off-sets, each stage being rather narrower than the one below it (fig. 212). The lower windows are mere

* See article thereon.

loopholes; the belfry stage has generally a two-light window divided by a mid-wall shaft. The top of the tower in almost every example has been altered at a later date; it probably had a low pyramidal spire of stone or wood. At Sompting each face of the tower is finished with a gable, from the apex of which rises the hip of the spire (fig. 219). Norman towers are low and massive, they have sometimes the flat pilaster buttress of the period; the lower windows are larger and the belfry stage is often arcaded and has a pair of two-light windows on each side. No spires remain; probably they were low pyramids.

In the Gothic period, while the details follow the variations of the style, neither the general proportions nor the degree of richness afford much indication of the date; there is however a good deal of local character. In the south-east of England the tower is usually rather low and plain without spire or pinnacles, and the staircase turret is carried up above the parapet; when there is a spire it is commonly of timber covered with lead or with shingles (fig. 220). Small churches have often a small wooden tower with a spire erected on the nave roof at the west end (fig. 27). On the other hand, in the south-west, especially in Somersetshire, the towers, particularly those of the fifteenth century, are lofty and elaborate and are crowned with pinnacles.

In the south midlands there is often no tower, but the west wall is carried up above the roof to form a bell-cote,* being pierced with one or more arched openings in which the bells hang, and finished with a gable (fig. 26). Further north we come to stone spires, at first springing from the face of the wall and with broaches at the angles (fig. 221), but in later times rising from behind a parapet. In East Anglia there are no spires with the solitary but very notable

* See article thereon.

exception of Norwich Cathedral. Small towers were sometimes circular because they were built of flint, and stone for the quoins was difficult to come by. The several parts of Cambridgeshire show in a rather

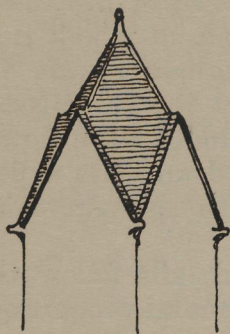


FIG. 219. SPIRE
PROBABLY OF SAXON
FORM
SOMPTING

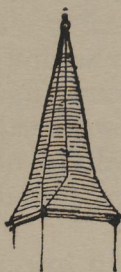


FIG. 220.
SHINGLE SPIRE

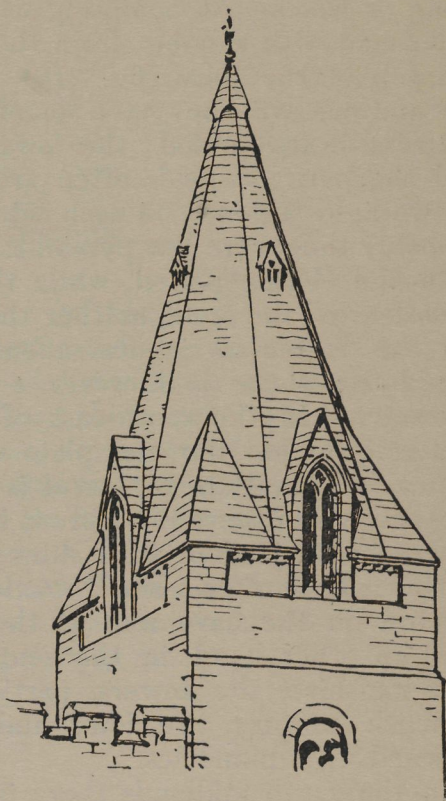


FIG. 221. BROACH SPIRE
KING'S CLIFF, NORTHAMPTONSHIRE

remarkable way the influence of the neighbouring counties. Thus the west tower of Ely follows a type which is found in Lincolnshire and Northamptonshire, that is, the upper stage is octagonal while high detached turrets rise from the angles of the square lower part. This arrangement is rather French and did not spread far or become common in England.

On the Welsh border the towers are usually rather low with a flat pyramidal roof, or they are small wooden turrets on the roof like those in the south-east. In the north there are no spires, and the towers are usually severe.

After the Reformation few churches and consequently few steeples were built till after the Fire of London, when Sir Christopher Wren produced his remarkably varied and original designs for the City churches. These steeples consist of a tower of which the lower part is always perfectly plain while the top stage contains a large belfry window and is enriched with pilasters and entablature. The spire never follows the simple Gothic form, and it is generally an elaborate composition. These steeples served as models for the eighteenth-century architects.

STELE. The stone often placed at the head of the grave of a Greek: it was about five feet high, two and a half feet wide and nine inches thick, and was carved in low relief with a scene supposed to represent the death of the person commemorated or some other subject (fig. 222).

STILL-ROOM. A room in which cordials and home-made liqueurs were prepared.



FIG. 222. GREEK STELE

STOCK OR STOUP FOR HOLY WATER. *See* HOLY-WATER STOCK.

STRAIGHT JOINT. A vertical joint in a wall continuing through two or more courses.

STRAP ORNAMENT. A kind of pierced tracery used in parapets in Elizabethan architecture (fig. 223).

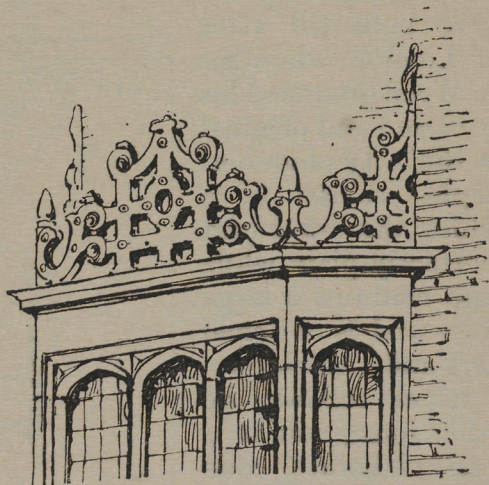


FIG. 223. STRAP-WORK, ST. JOHN'S COLLEGE, CAMBRIDGE

STRING COURSE. A projecting horizontal course in a wall. In Classical and Renaissance architecture it is deep and plain (fig. 224); in Gothic it is shallow and moulded (fig. 225).

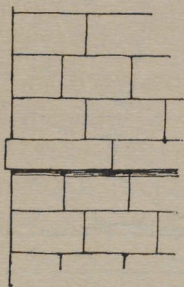


FIG. 224.
RENAISSANCE STRING COURSE

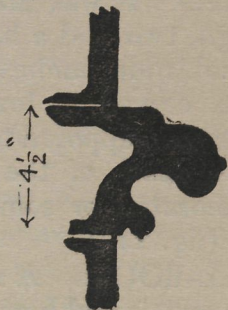


FIG. 225.
GOTHIC STRING COURSE

STRUT. "In carpentry, any piece that keeps two others from approaching and is therefore in a state of compression in contradistinction to a tie" (P.).

STUART PERIOD. *See* RENAISSANCE ARCHITECTURE.

STUCCO (Ital.). The term seems to have been introduced into England in the nineteenth century; it is generally confined to smooth, hard plaster of various kinds applied to the outside walls of buildings to imitate masonry.

STUD. One of a series of vertical members in a timber partition or wall; laths, to carry the plaster, are nailed to them, or the spaces between them are filled with brick or pugging.

STUMP TRACERY. *See* TRACERY.

STYLOBATE, STYLOBATA. A continuous pedestal under a row of columns (P.), a plinth* or plain storey under an order.*

SUMMER. *See* SOMMER.

SYMBOL, SYMBOLISM. The pagan practice of using symbols to represent ideas was continued by the early Christians, but it gradually gave way to the desire to depict actual scenes. For instance the Cross is used in early days; the scene of the crucifixion only in later times; the symbols of the peacock for the Resurrection and the circle for Eternity are found in the Catacombs, but rarely in the later middle ages.

Pictures of saints and martyrs bearing the instruments of their death or of their torture, or other emblems, are common throughout the middle ages and in later times, but these are not strictly symbols. (*See* Appendix.)

It may be safely said that symbolism has not given birth to any architectural form, but has been invariably invented to suit already existing features which

* See article thereon.

had arisen from practical considerations; in a few instances it has perpetuated a feature, as, for instance, the cruciform plan of a church.

SYSTYLE. *See* TEMPLE.

TABERNACLE. A niche.*

TABLE. A medieval term for a panel on which a picture was painted; a triptych* was called a 'table with leaves.'

TAENIA, TENIA. The fillet* at the top of the architrave and of the frieze in the Doric entablature. (*See* ORDERS.)

TAPESTRY. A woven material, decorated with embroidery, used for covering the walls of medieval buildings. It was superseded in the sixteenth century by a cheaper material known as 'painted cloths.'

TEMENOS. A courtyard surrounding a Greek or Roman temple.

TEMPERA. Painting in transparent colours made by mixing the powdered pigment with water and parchment-size for wall paintings on plaster, or with water and yolk of egg for paintings on panel. The ground is a hard surface of very fine plaster, about as thick as drawing-paper, by the Italians called *gesso*. Most English medieval paintings were done in this way. (*See* FRESCO and PAINTING.)

TEMPLE. The arrangement of the Greek temple varies in different examples, but the normal plan may be described as follows. There was a principal chamber called the *cella* or *naos* divided by columns¹ into a central space and aisles, and over the aisles there was a gallery. Behind the naos there was a smaller chamber called the *opisthodomos*. The naos was entered through a *vestibule*, in front of which was a *portico* or *pronaos*.

* See article thereon.

¹ In the larger examples.

The opisthodomos was entered (generally) from the naos and also from another portico at the other end of the temple called the *posticum*.



FIG. 226.
PORTICO *in antis*,
DISTYLE

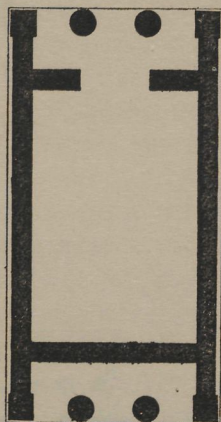


FIG. 227.
PORTICO *in antis*,
DISTYLE

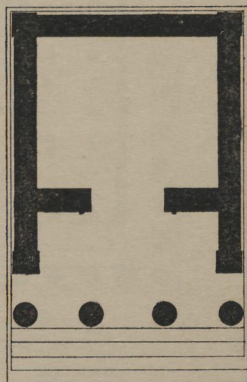


FIG. 228.
PROSTYLE PORTICO,
TETRASTYLE

The pronaos or principal entrance was almost always towards the east, and at the further end of the naos, facing the entrance, was the statue of the god, and in front of it an altar. The building was often surrounded by a row of columns forming a *peristyle*, and is said to be *peripteral*, or by two rows, when it is called *dipteral*. If there is one row with a wide space at the back the building is said to be *pseudo-dipteral*. There were no windows, and the method of lighting is still doubtful. Some temples had apparently a large hole in the roof called an *opaion* or *hypætheron*; where the roof was covered with Parian marble it is said that sufficient light would pass through the slabs, which were about two inches thick; there seems to be evidence that some of these slabs were pierced with holes through which light was admitted. The suggestion that there was an hypæ-

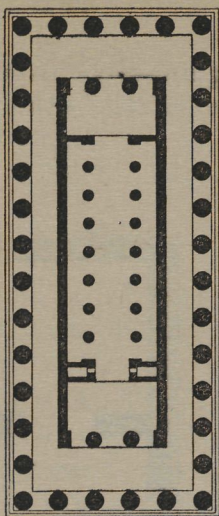


FIG. 229.
HEXASTYLE PERIPTERAL
TEMPLE

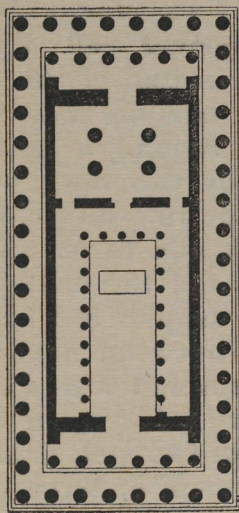


FIG. 231.
OCTOSTYLE PERIPTERAL
TEMPLE

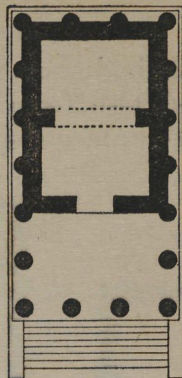


FIG. 230.
TETRASTYLE PSEUDO-PERIPTERAL
TEMPLE

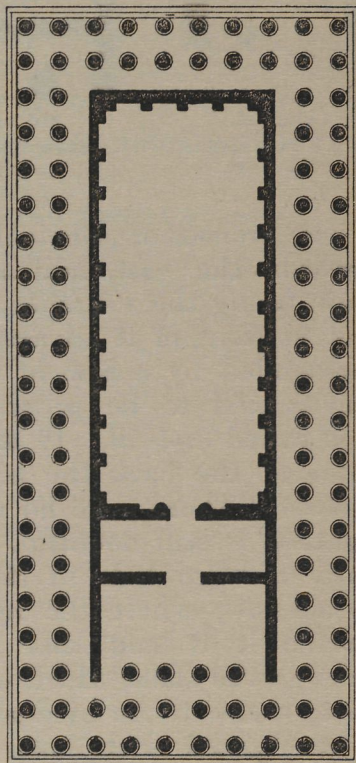


FIG. 232.
DECASTYLE DIPTERAL TEMPLE

theron over the gallery above the aisles, forming it into a sort of clear-storey, is unsupported by evidence. In considering any theory it must be remembered, firstly, that in the bright climate of Greece a very small aperture, very often the mere open door, would admit enough light even for a congregational service; and secondly, that the Greek temple was not built for congregational services, but as a shrine for the statue of a god, at which sacrifice was offered to him, only the priest and the privileged few entering the naos, the people remaining without in the *temenos* or enclosure; and lastly, for a ritual such as this a well-lighted temple was not required, and the mystery of gloom was perhaps preferred.

The Romans seem to have been indifferent to orientation. At the end opposite to the entrance there was often an apse or alcove; the temples dedicated to Vesta were circular. Sometimes instead of a peristyle they placed half-columns against the side walls; the building is then described as *pseudo-peripteral*. This had been seldom or never done by the Greeks.

The portico is described by the number and arrangement of the columns. In small and early temples the sides were enclosed by walls and two columns were placed between the ends of these. The walls are called *antæ* and the portico is said to be *in antis*. In the larger porticoes the side walls are very short or become mere pilasters, and columns are placed in front of them, and the portico is then called *prostyle*. If there is a portico of this sort at each end the building is called *amphi-prostyle*. A portico of two columns is called *distyle*; one of four columns, *tetra-style*; of six columns, *hexastyle*; eight columns, *octastyle*; ten, *decastyle*; twelve (rare), *dodecastyle*. There is only one example of an uneven number of columns: *penta-style*, five columns. The addition of a peristyle gives, in many examples, two rows of columns to the portico;

in that case it is the number in the outer row which gives its name to the portico.

When the intercolumniation or space between the columns is one diameter and a half of a column it is said to be *pyncostyle*; when two diameters, *systyle*; when two diameters and a quarter, *eustyle*; when three or four diameters, *diastyle*; when four or five diameters, *aræostyle*. When columns are grouped in couples the arrangement is called *aræosystyle*.

TENON. The end of a piece of wood shaped so as to fit into a mortice or hole, in another piece (fig. 233.)

TERCENTO (lit. 'three hundred'). Italian work of the fourteenth century.

TERRA-COTTA (Ital., lit. baked earth). A variety of brick made from a specially prepared clay and baked at a high temperature, so that the surface becomes partially vitrified. It was used from very early times and was common in Italy throughout the middle ages. It was imported into England from Italy early in the sixteenth century, chiefly as medallions. Since about the middle of the nineteenth century great quantities have been manufactured in England and it is now largely used, especially in towns, owing to its power of resisting the disintegrating influences of a smoky atmosphere.

TESSELLATED (from Lat. *tessellatus*, checkered, from *tessella*, a small cube of stone, dimin. of *tessera*, a die used for playing—s.). A mosaic* on a floor, wall or

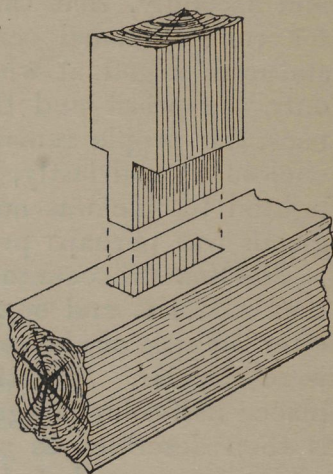


FIG. 233. TENON AND MORTICE

* See article thereon.

vault, composed of small cubes (*tesseræ*) of stone, marble, earthenware or glass.

TESSERA. *See* TESSELLATED.

TESTER. A canopy over a bed, pulpit or altar.

TETRASTYLE. *See* TEMPLE.

THATCH. Formerly (and still in rural parts) called *thack*, which would seem to be more correct. "The old word *to thack, theak*, or *thatch*, frequently signifies no more than to cover, and is used in reference to tiles, lead, or other materials" (P.). Thatch is now made of reed (the most durable material), straw, sedge or flags.

THEATRE (Gk. *θεάομαι*, I see). The earliest form of theatre, or place especially intended for shows, in England was the *Round* or amphitheatre, a circular area surrounded by earth-banks, of pre-Roman age. It is said that these were at one time common all over the country and that they were used for bull-baiting, bear-baiting, sports and pastimes and for spectacles of all kinds, including, in some cases at least, miracle-plays. There are some remarkable examples remaining in Cornwall. The sloping bank is cut into steps to form tiers of seats, though one at St. Just, which is one hundred and twenty-six feet in diameter, formerly had stone seats. With these may be compared Chaucer's description of the lists in the *Knight's Tale* :

That swich a noble theatre as it was,
I dar wel seyn that in this world ther nas.
The circuit a myle was aboute,
Walled of stoon, and diked al with-oute.
Round was the shap, in maner of compas,
Ful of degrees, the heighte of sixty pas,
That, whan a man was set on o degree
He letted nat his felawe for to see.

But the early drama—the Miracle-plays and Passion-plays, the Morals or Moralities, and the Interludes and Pageants,—generally had no fixed abode. Often the performance was in a church. Sometimes it formed part of a great annual procession, being given in the street on a high stage on wheels; this perambulating theatre was of two storeys, the upper being the stage and the lower a room where the actors apparelled themselves.

In the reign of Elizabeth a great number of companies of actors were formed, each under the protection of the sovereign or a noble, and called his ‘servants.’ These companies travelled about the country and gave their performance in any place that was available, such as the inn-yard of a country town. An inn-yard was in many ways suitable. It was entirely surrounded by buildings, the various rooms of which were entered from galleries open to the yard. These galleries gave good covered accommodation to the well-to-do; the poorer folk or ‘groundlings’ stood about on the ground. A rude stage was erected in the centre of the yard; there was, of course, no scenery. At the end of the sixteenth century or at the beginning of the seventeenth the stage was probably moved to one side of the yard, and the part of the lowest gallery over it could be used by the players for the upper stage which was required by the early drama.

Plays were also given in the halls of large country-houses and of the Inns of Court and of the colleges at Oxford and Cambridge both before and after the establishment of regular theatres. The spectators sat at the dais end of the hall; the players occupied the lower end against the screen, the two doors of which served for their entrances and exits, and the musicians’ gallery no doubt served for the upper stage already alluded to.

The first theatre of modern type in England was *The Theatre*, built in 1576 in Finsbury Fields. In 1598

it was rebuilt on the Bankside (on the Surrey side of the river) as *The Globe*. It was octagonal in form, and was built of timber; the central space, the pit, was open to the sky, only the galleries and a part of the stage being covered in.

In this and other early theatres, as the Curtain, Fortune, Rose, Hope, Swan, Newington Butts, Blackfriars, there was a small gallery over the back part of the stage. This gallery was required by the form of many of the old plays, and it was put to a variety of uses (fig. 237). It served for a balcony or upper window, as in 'Romeo and Juliet,' or for the ram-parts of the walls of Angiers in 'King John'; or for the performance of a play within a play, as in 'Hamlet.' But its chief use was that it enabled the actors to present two scenes at the same time, as, for instance, the Council-chamber and the ante-chamber in 'Henry VIII.' (v. 2).

Both the gallery and the part of the stage under it were hung with curtains, which parted in the middle and were drawn aside. The stage projected boldly out into the central area, so that the sides as well as the front were exposed. There was no scenery beyond a few conventional properties, such as a tomb or a smoking cauldron. A trap-door in the floor seems to have been considered necessary. Some of the early playhouses were large 'public' theatres, others were smaller, called private, and entirely covered in. Theatres were also distinguished as 'summer' or open, and 'winter' or covered theatres.

The theatre of Shakespeare's day seems to owe something to each of those places which have been mentioned above as the scene of early play-acting. The circular or polygonal form was probably derived from the 'round'; some of the details of the stage from the miracle-play, the stage of which was provided with a trap-door. In the tiers of wooden galleries we see the

hostelry, in the open central space the hostelry-yard in which the 'groundlings' stood. The two doors in the screen at the lower end of a hall in a private house or college continued as features in the background of the stage into the eighteenth century.

Scenery was very much elaborated in the masques

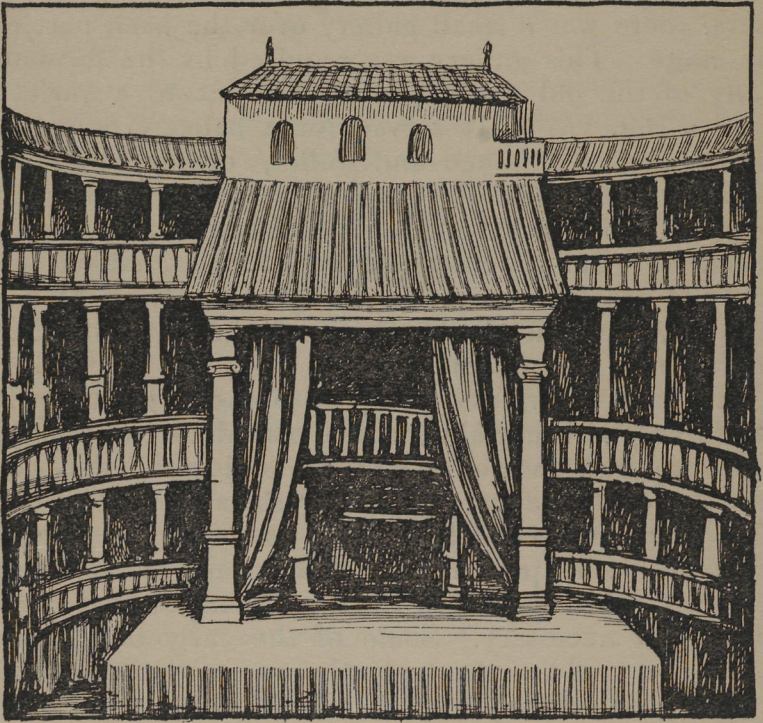


FIG. 234. THE FORTUNE THEATRE, LONDON

designed by Inigo Jones early in the seventeenth century and was carried still further by Sir William Davenant fifty years later.

In the time of Charles II. there were but two small theatres in London. The stage still projected and the central space was still open to the sky. The whole building was covered in towards the end of the

seventeenth century or early in the eighteenth. Footlights were introduced by Garrick in 1765 after a visit to France. The stage still projected boldly into the auditorium in the middle of the nineteenth century although it was at the same time deeply recessed.

THURIBLE. *See CENSER.*

TIE-BEAM. A horizontal timber forming part of a roof* and resting on the two side walls of the building (figs. 203, 209, 210.)

TILE FLOOR. Most medieval paving tiles are square, from four to six inches each way and about an inch thick. They are either plain or have a simple pattern on each tile (fig. 235); sometimes the design



FIG. 235. RED AND BUFF PAVING TILE
Thirteenth century

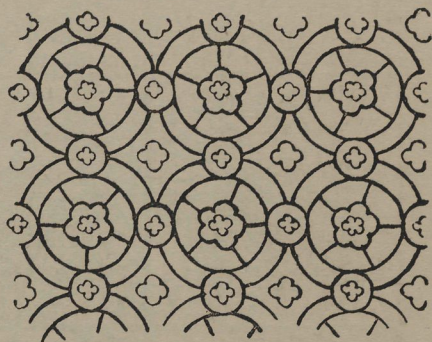


FIG. 236. TILE PAVEMENT
ICKLINGHAM

extends over several tiles. Occasionally tiles of several different shapes are used, fitting into one another to form a pattern (fig. 236), and there are a few examples, as in Prior Crauden's Chapel at Ely, in which a large picture is wrought in tiles of two colours. The body of the tile is usually red with the device of foliage, figures, heraldry or grotesques in buff. A deep sinking was made in the red clay and this was filled

* See article thereon.



FIG. 237. PAVEMENT OF INCISED TILES, BANGOR
Probably early fourteenth century

with white clay; the whole was then covered with a glaze which turned the white into yellow and gave the red a richer colour. Sometimes the pattern was simply incised (fig. 237). Black tiles are occasionally found and sometimes a green glaze was used. In and after the sixteenth century pavements of tile were less used for the better class of buildings and stone and marble became more general. The art of making ornamental tiles died out and was not revived till the nineteenth century.

TILE HANGING. The walls of timber houses, especially in the south of England, are commonly protected by tiles fixed like those of a roof, and the practice is an old one. The tiles are either plain rectangles or the lower edges are curved. The system affords a good protection against driving rains and is known as 'weather tiling.'

TILE ROOF. Roof-tiles may be divided into two classes: (1) Plain tiles, which are flat and are laid edge to edge like slates, each course overlapping by about three inches the course next but one below it. (2) Curved tiles of various forms; in these the vertical edges overlap, in consequence of which a course need only overlap the next course below it, instead of the next but one. The reason of this will at once be apparent by arranging on a table sheets of paper about twice as long as they are wide. The commonest and oldest form is the pantile, which resembles the marble tile used by the Greeks. Sometimes, instead of the edges overlapping, both edges are turned up and covered by another tile; this is the Italian method and was used by the Romans.

TIMBER BUILDING. Half-timber-work as it is now called, because the timbers which show on the face are about the same width as the spaces between, was the general method of construction for houses* in the middle

* See article thereon.

ages and remained the most common till the eighteenth century.

The artistic treatment varies in different districts. The system reached its highest development in the well-timbered districts of Gloucestershire, Herefordshire, Shropshire, Cheshire, and south Lancashire. It would seem that in East Anglia it was not much used and that the houses were entirely covered with plaster and were at an earlier period than in other parts built of brick.

The practice of making the upper storeys of houses overhang was due to the use of timber. It not only gave more space in the upper rooms, but it was, if anything, rather stronger than if the wall had been vertical: the weight of the upper wall on the ends of the joists counter-balanced the weight of the floor; some of the timbers could be more strongly joined, and the brackets under each projection, which would have been in the way inside the house, gave rigidity to the building. Each projection also protected the wall below it from the rain.

The normal system of framing was as follows (fig. 239): A plate was laid on a low wall about level with the floor and into this were tenoned upright studs about 8 inches by 5 inches with their broad faces outwards, and from 8 inches to 12 inches apart. Stronger posts were placed at intervals of 5 or 6 feet. The studs and posts were framed into another plate at the top. On this plate rested the floor joists of the upper storey. They were of similar scantlings to the studs, and there were stronger beams over the large posts.

The beams and the common joists projected beyond the wall a distance of from one foot to three feet. Curved brackets, springing from the large posts,

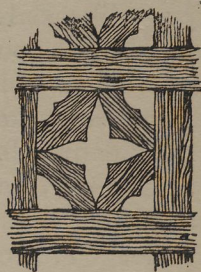


FIG. 238.
TIMBER FRAMING

supported the ends of the principal beams. On the ends of the beams and joists was laid another plate, and on this was constructed the framing of the upper storey in the same way as that of the lower storey; and so with the third storey. To give the house lateral stiffness, curved struts were placed along its



FIG. 239. TIMBER HOUSE, SHREWSBURY

face in the angles between the posts and plates (fig. 239). If the house was at the corner of a street, so that its upper storey had to project on two sides, the angle post was very substantial and was shaped out of a naturally curved piece of timber so as in itself to form a strong bracket under the angle post of the upper storey; in order that the floor joists might project on

both sides of the house they were framed in a peculiar way into a diagonal beam (fig. 240).

The spaces between the timbers are usually filled with a mixture of clay and straw called pugging in

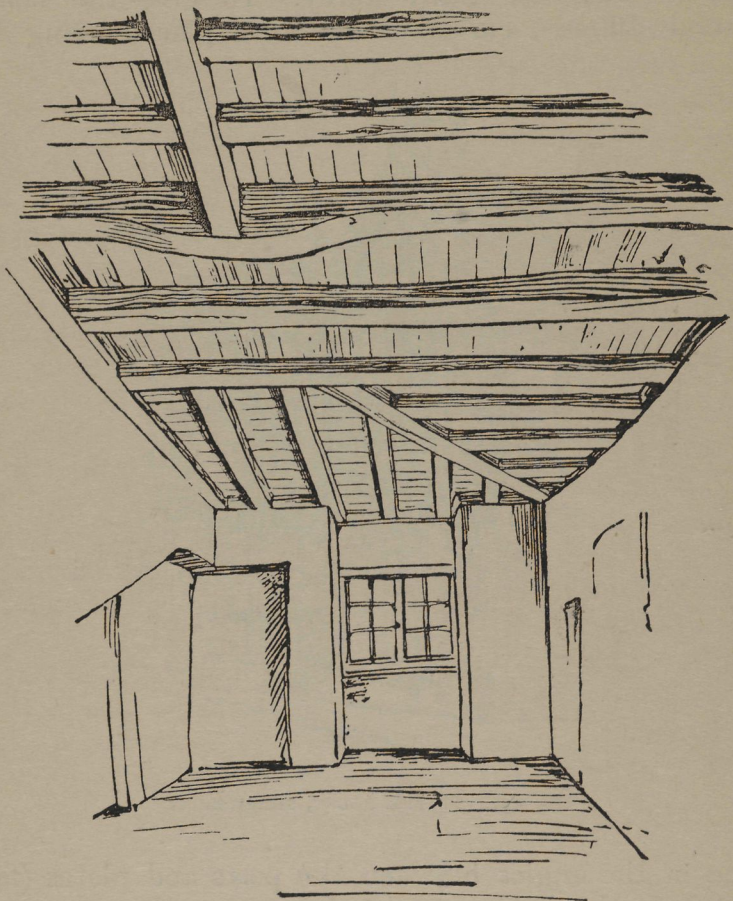


FIG. 240. FRAMING OF THE FLOOR IN A CORNER HOUSE

which stakes are embedded, the pugging being covered inside and out with a thin coat of plaster. Sometimes 'brick-nogging' is used instead of pugging and is left exposed to view. In the western counties the timbers

are commonly tarred and the plaster is whitewashed, but in the south-east the timber is allowed to weather a natural grey and the plaster is coloured yellow.

In the plainer buildings the framing was generally simple; the plates were moulded or carved with a scroll, the brackets sprang from small shafts cut on the posts, the angle posts were rather more richly ornamented, the barge-boards were moulded, carved or traceried. In the west the framing itself was often elaborated, being divided into square panels containing devices formed by variously cut timbers (fig. 238); small oriel windows project under the overhanging storey and sometimes have tracery.

TOLBOOTH. *See* GUILDHALL.

TOMB. *See* MONUMENT, SHRINE.

TOOTH ORNAMENT. *See* DOG-TOOTH.

TORUS. *See* MOULDING (fig. 182).

TOUCH-STONE. A medieval name for a hard black stone capable of taking a polish; sometimes used for the tops of tombs in the sixteenth and seventeenth centuries; 'so called from its supposed identity with or resemblance to the *lapis Lydius*, or touch-stone, used by goldsmiths in assaying the quality of gold by the test of aqua fortis' (P.).

TOWER. *See* CASTLE, CHURCH, HOUSE, STEEPLE.

TOWER-LIGHT. A loophole in a tower; any window in a tower; one of the tracery-lights, like a loophole, in a Perpendicular window.

TOWN-HALL. *See* GUILDHALL.

TRABEATED (Lat. *trabs*, a beam). A system of architecture in which the lintel is used.

TRACERY. The beginnings of tracery are to be found in the blind-storey or triforium of large churches and in the windows, but it was in early times copied in

wood screens and this use of it continually increased till in the fifteenth century; it was also applied to solid surfaces such as sides of chests and finally to walls.

It is remarkable that tracery and cusping were used much earlier in circular windows than in others, and at most periods were in a more advanced stage of elaboration (fig. 241). The commonest form in early round windows is a series of straight mullions radiating from a central circle to a ring of tracery round the circumference. These are sometimes called wheel windows. Otherwise the tracery follows the vogue of the period. Round windows were little used in the later middle ages.

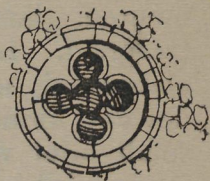


FIG. 241. ROUND
CUSPED WINDOW

In the twelfth century it became a common practice to group together two or more lancet windows, or a number of small arches forming the triforium-gallery arcade (fig. 242). The flat piece of masonry left above the small arches was sometimes pierced with a circle or quatrefoil or by a group of circles (fig. 243.) This forms what is known as Plate-tracery and it is the parent of all later forms of tracery. The decorative effect of this treatment must have been at once apparent, and the idea was rapidly developed in the first half of the thirteenth century. Gradually the two windows were brought close together with only a narrow mullion between them; inside the building they were placed in a single arched recess, and outside the whole group was embraced under one hood-mould (figs. 244, 245).

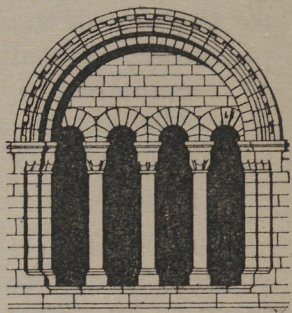


FIG. 242. TRIFORIUM ARCADE

Broad and irregular pieces of the stone 'plate' were still left between the lancets and the piercing in the

head. These spaces were gradually reduced by enlarging the top piercing and so shaping it as to make it fill as much of the tympanum as possible. The remaining spaces were next pierced so that the stone bar between any two lights was never wider than the

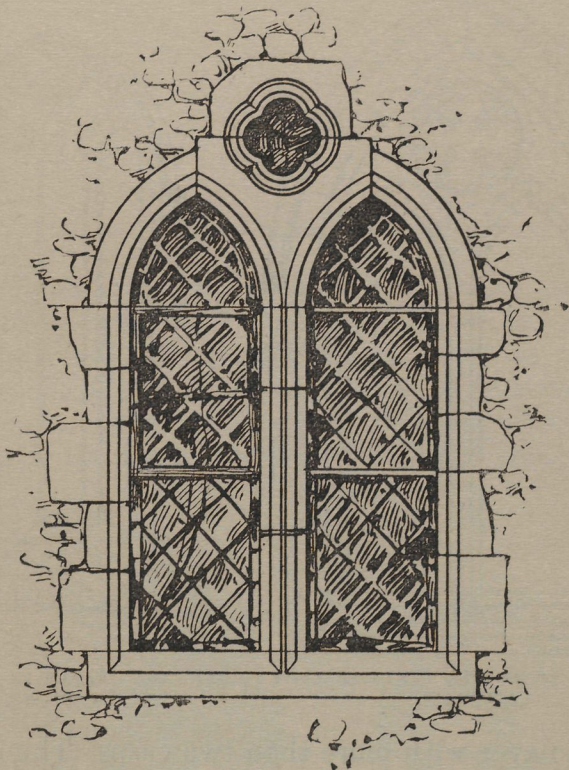


FIG. 243. EARLIEST PLATE TRACERY, GREAT ABINGTON

mullion (fig. 245). This is called Bar-tracery, a term which includes all the later forms of tracery. This stage was reached rather before the middle of the thirteenth century. The more important members are emphasised by being made wider and thicker from inside to outside than the less important.

At first the heads of the lights are plain arches, although in plate tracery they had sometimes been foliated; but the circle in the head has bold cusps, usually three, four or five. In the latter part of the thirteenth century the heads of the lights are cusped

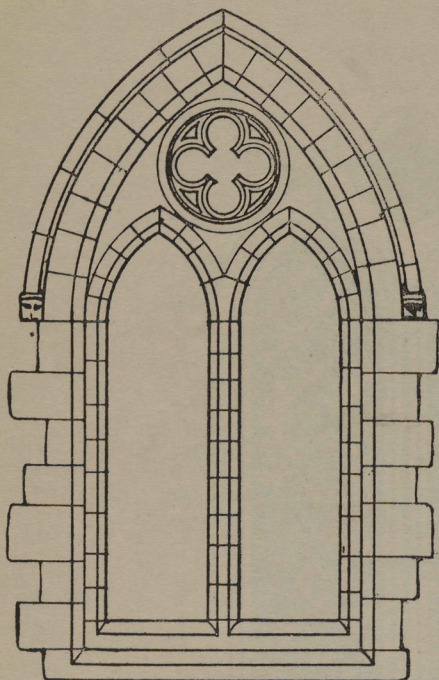


FIG. 244. DEVELOPED PLATE-TRACERY
BALSHAM

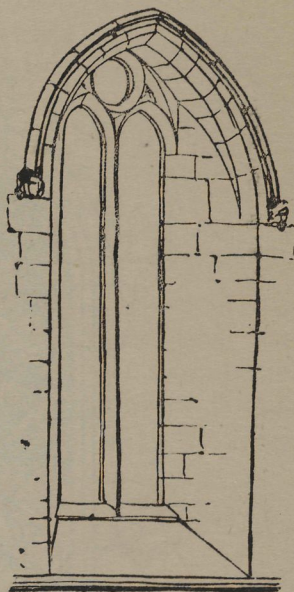


FIG. 245. EARLY BAR-TRACERY
CASTOR

also, but never with more than two cusps. The cusping springs from the flat soffit of the arch or circle, and is called soffit cusping (figs. 246 *a*, 248). About the end of the thirteenth century the whole bar sometimes follows the line of foliation (fig. 249, trefoils).

Hitherto the tracery had consisted of simple symmetrical forms such as circles, trefoils and quatrefoils, whose perimeters, although they touch at points, are distinct; the heads of the lights are simple two-

centred arches. This is called Geometrical tracery. The cusp is now no longer confined to the soffit, but includes nearly the whole of the chamfer or moulding which forms the innermost member of the tracery (fig. 246 *b*).

In the earliest tracery attention was concentrated on

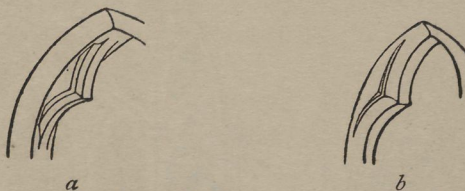


FIG. 246. *a*, SOFFIT CUSPING. *b*, LATER CUSPING

the piercings, and the aim was to give these a good form. Pieces of stone of awkward shape were left between them (fig. 244). In later work, as we shall presently see, the lines of the stonework were the chief consideration, and the graceful flow of these was the first thought of the designer, the form of the tracery-lights

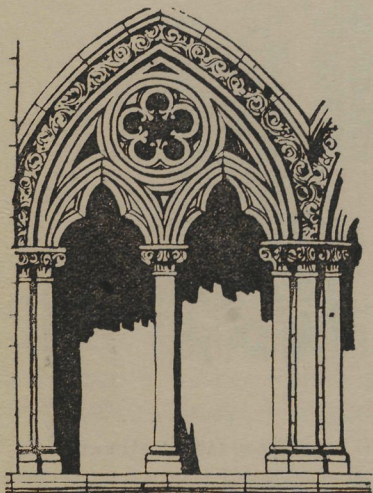


FIG 247. GEOMETRICAL TRACERY
WESTMINSTER ABBEY

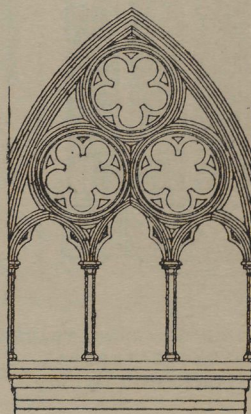


FIG. 248. GEOMETRICAL TRACERY
WITH SOFFIT CUSPING

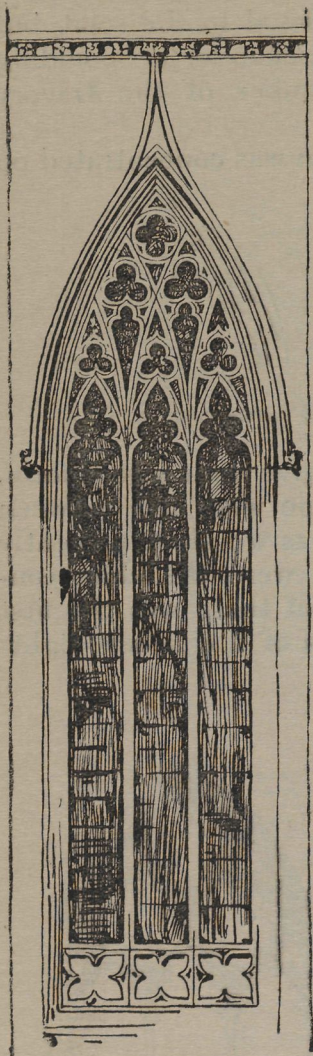


FIG. 249. GEOMETRICAL TRACERY
LICHFIELD CATHEDRAL
Early fourteenth century

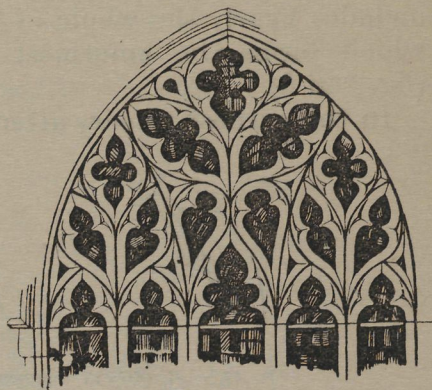


FIG. 250.
FLOWING TRACERY, GRANTCHESTER

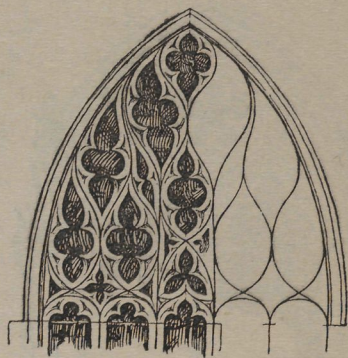


FIG. 251.
FLAMBOYANT TRACERY

received less attention (fig. 254). At the period we have now reached there is a fairly equal balance between the claims of the piercing and of the masonry (figs. 247, 249).

Early in the fourteenth century the heads of the lights become ogee-shaped (fig. 252), the boundary lines of adjacent piercings coincide, the lines are sinuous, the piercings are no longer symmetrical (fig. 250); this tracery is called *Flowing*. The cusps are sharper and more numerous, the heads of the lights having four instead of only two, and the cusping of the tracery corresponds. Geometrical tracery continues in use and the two are sometimes combined. At the same

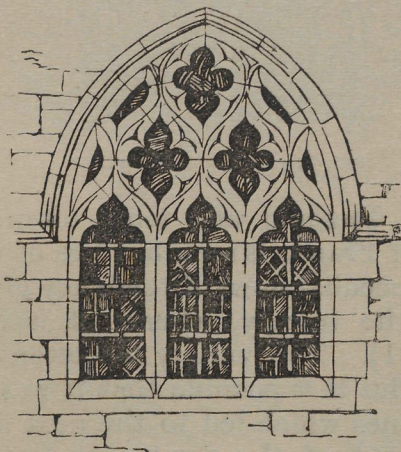


FIG. 252. RETICULATED TRACERY, MERTON COLLEGE, OXFORD

time also another variety called *Reticulated tracery* is used (fig. 252): in this the window head is filled with a simple pattern repeated without variety, without subordination and without conformity to the arch in which it was placed. In Kent a peculiar form of cusping is used consisting of two cusps close together, or, as it might be called, of a split cusp. This is called *Kentish tracery* (fig. 253).

In English flowing tracery the forms are generally full and round and the design as a whole keeps something of its geometrical character (fig. 250). But

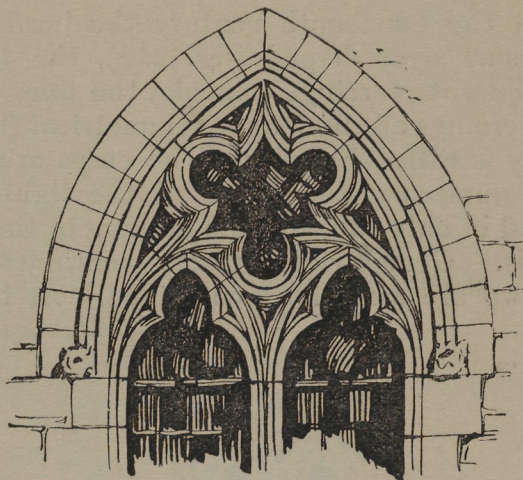


FIG. 253. KENTISH TRACERY

occasionally in England and more often in Scotland the influence of France is seen in a loss of all structural form and in a peculiar upward tendency giving a flame-like form to the tracery, whence it is called Flamboyant (fig. 251). This variety has often a very weak appearance. But it is possible that it was the upward trend of the lines which led to the next development, in the latter part of the fourteenth century, in the direction of greater strength. Some of the bars are made quite straight and vertical (fig. 255). This characteristic becomes more and more pronounced (fig. 256) till all flowing lines are lost (fig. 257). Hence it is called Perpendicular tracery. This form is peculiar to Great Britain. Windows of the fifteenth century often have a transom with sub-arches and sometimes short pieces of transom are introduced into the tracery. The cusps are more pronounced than

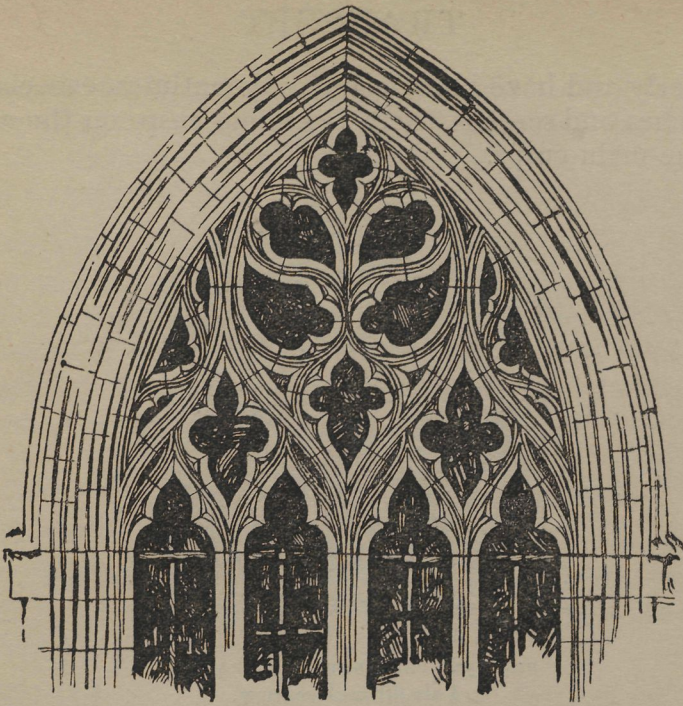


FIG. 254. FLOWING TRACERY APPROACHING TO FLAMBOYANT
CHESTER CATHEDRAL

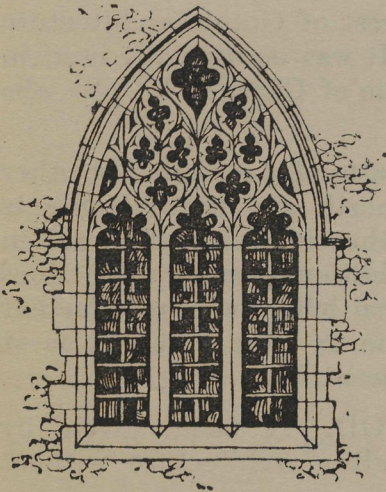


FIG. 255. THE BEGINNING OF
PERPENDICULAR TRACERY
Late fourteenth century



FIG. 256.
ADVANCE TOWARDS
PERPENDICULAR TRACERY

formerly and have blunt points. Sometimes, especially in niches and screens, there are minor cusps on the arcs of the main cusps.

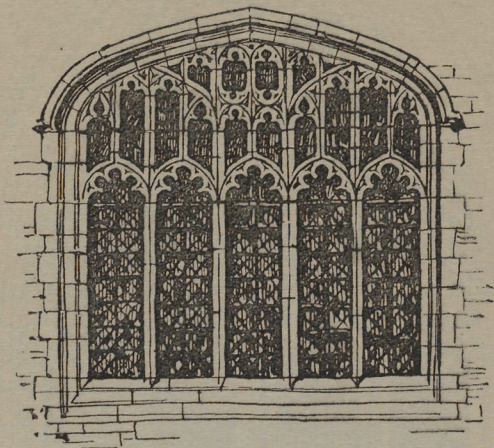


FIG. 257. PERPENDICULAR TRACERY
Late fifteenth century

At the end of the fifteenth century tracery had become very monotonous and lifeless, and of course it ceased altogether with the rest of Gothic architecture in the sixteenth century. It was occasionally used in the Gothic revival in the time of Charles II. (*See also WINDOW.*)

TRANSEPT. The cross arm of a church* or other building. Sometimes the north and south transepts together are spoken of in the singular, sometimes in the plural. In England additional transepts besides the main transepts were often built sometimes further east as at Canterbury, at the extreme east end as at Durham or at the west end as at Ely.

TRANSITIONAL PERIOD. A name given by Sharpe to a phase of English architecture without

* See article thereon.

definite limits, but considered by him to begin about 1145 and to end about 1190. (*See Appendix.*) Its characteristic is, as its name implies, a mingling of Norman and Gothic features. (*See NORMAN, EARLY ENGLISH.*)

TRANSOM. A horizontal bar in a window. It was first used in the thirteenth century. Its object was in some cases to stiffen the mullions,* in others to form a convenient division between the shutter with which, in domestic work, the lower part of the window was closed, and the upper part which was filled with glass. It was rarely used in churches before the fifteenth century, but it then became common and had a small arch under it. (*See TRACERY, WINDOW.*)

TREFOIL. (1) A three-lobed panel or tracery-light. (2) A three-lobed leaf characteristic of thirteenth-century carving.

TRELLIS. A lattice or grating formed of cross-bars.

TRIBUNE. A raised seat or throne for the emperor or judge in a Roman basilica. It was placed in a central position against the wall of the apse; it was the origin of the seat of the bishop or celebrant in the early Christian churches.*

TRIFORIUM. An upper storey over the aisle of a cathedral or large church, with arches (called the triforium arcade) in the wall between it and the nave. It is derived from the Roman pagan basilica and was in early Christian days used for the accommodation of women. In English work of the eleventh and twelfth centuries it is lofty, being about the same height as the clear-storey and nearly as high as the lowest storey. But it is gradually reduced in height and finally is omitted.

* See article thereon.

TRIGLYPH (Gk., *lit.* 'thrice-cloven' (s.), hence presumably 'cloven into three'). An ornament of the Doric frieze consisting of a slightly projecting block with two vertical V-shaped grooves and two half-grooves or chamfers on the edges. One is placed over each column and one over each interval. They are supposed to represent the end of beams used in early timber buildings. (*See GREEK ARCHITECTURE and ORDER.*)

TRILITHON. A prehistoric erection consisting of three large stones: two pillars and a lintel, like those at Stonehenge.

TRIPTICH, TRIPTYCH. A wooden reredos consisting of a central painted panel with two folding doors, on the inner sides of which pictures were also painted. It was a common form of reredos in England in the middle ages and was called 'a table with leaves.'

TRIUMPHAL ARCH. (1) An archway erected over a road or street as a memorial, e.g. the Arch of Titus and others in Rome. (2) The arch forming the entrance from the nave to the apse in a basilican church, always highly decorated.

TRUSS. A system of timbers so framed together as to be self-supporting and capable of bridging over a space or forming a bracket, e.g. a framed principal of a roof.



FIG. 258. TUDOR FLOWER OR BRATTISHING

TUDOR FLOWER. An upright leaf used in close repetition as a cresting in work of the fifteenth century, called also brattishing* (fig. 258).

TUDOR PERIOD. *See* RENAISSANCE ARCHITECTURE.

TURRET. A small tower; in churches generally used for a staircase, or for a bell; in castles for various purposes.

TUSCAN ORDER. *See* ORDER.

TYMPANUM (Lat. *tympanum*, a drum, tympanum). The space enclosed between a lintel and an arch or between an entablature and the sloping cornice of a pediment (fig. 6).

TYPE. 'The canopy over a pulpit, also called a sound-board' * (G.).

UNDERCROFT. A storey in a medieval building on the level of the ground, used as a store place or as menial offices, the principal rooms being on the first floor.

URN. A common ornament in Roman and Renaissance architecture, especially on the pedestals of a balustrade, on gate piers and similar places. Urns made of lead were much used in gardens in the eighteenth century. Probably derived from the sepulchral urns of the Romans.

VALLEY. A re-entering angle formed by the intersection of two roofs * (fig. 115, line *a b*.)

VANE. A weathercock; vanes were in use in the times of the Saxons, and in after ages were very extensively employed (P.).

VASE. *See* URN.

VAULT. (1) An arched ceiling or roof of brick, stone, etc.; hence (2) a chamber so covered; and hence (3) a tomb.

Probably there are no pre-Conquest vaults in Eng-

* See article thereon.

land except those which cover the narrow spaces in the *confessios** of Saxon churches.

Small Norman buildings were sometimes covered with a barrel-vault like a railway tunnel, also called a waggon-vault from its resemblance to the tilt of a waggon. More often the aisles of a church have groined vaulting, while the nave being wider and higher had a wooden roof only. A groined vault is one formed by the intersection of two barrel-vaults at right angles, the groin being the angle formed by the meeting of the two surfaces and crossing the area diagonally. The transept of Durham about 1100 is an early example of a large vault. The early groined vaults like those of the Romans, of which they were rude copies, have no ribs, but about 1100 both transverse and diagonal ribs were added.

The introduction of ribs allows a change in construction. The vault without ribs retains its tunnel-like construction, the whole vault surface forming an arch across the building. But when ribs are used these are built first and the spandrel filling is then thrown across from rib to rib in a succession of oblique arches, each course being arched so that when completed it is self-supporting. This apparently sudden change in construction was perhaps a development of the system of ribs which was sometimes used under Norman barrel-vaults and which continued throughout the middle ages wherever, as in bridges, a barrel-vault was used.

The construction of ribbed groining with the round arch involves some difficulties. The diagonal ribs being much longer than the transverse ribs, rose to a greater height if both were made semi-circular. This produced inconvenient forms in the spandrels, and various expedients were resorted to, such as stiling the transverse ribs and depressing the diagonals, in order

* See article thereon.

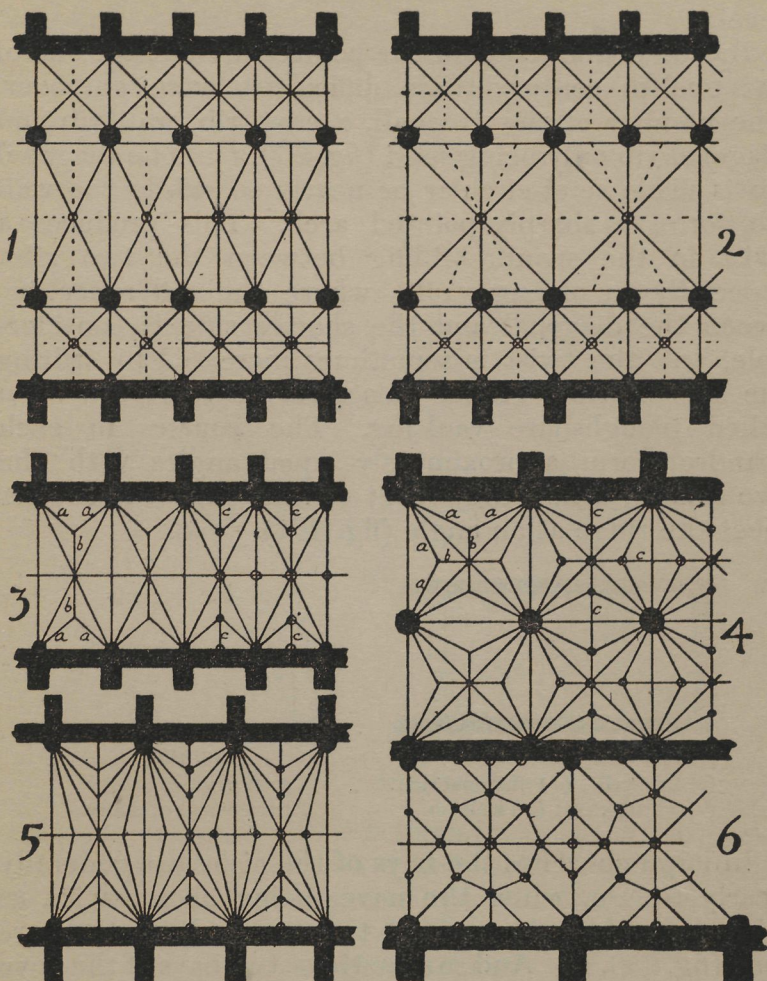


FIG. 259. PLANS OF VAULTS

1. Without and with ridge-ribs. 2. Sexpartite vault over nave. 3. Intermediate ribs (*a*) added; the ridge-rib (*b*) stopped against them, and (*c*) continued beyond to the wall. 4. The same. 5. More intermediate ribs added. 6. Fourteenth-century lierne vault.

to make the crowns of the two more nearly at the same level.

By the introduction of the pointed arch at the end of the twelfth century these difficulties were got over. The number of ribs is small, a cross rib, wall rib and diagonal rib only being used (fig. 259, 1). The diagonal rib is made semi-circular or nearly so, while the wall rib forms a sharply-pointed arch. This produces a twist in the spandrel-filling between the two ribs, especially in oblong vaults where the difference between the diagonal and the shorter side is considerable, and the twist is sometimes increased by stiling the shorter rib. Hence this form of vault has been called ploughshare vaulting. The courses in each spandrel form approximately equal angles with the two ribs on which they rest; consequently the courses meet the ridge at an angle (fig. 261).

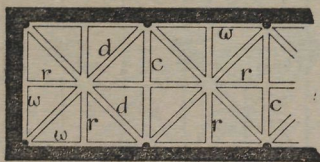


FIG. 260. VAULTING RIBS
(c) Cross rib; (d) diagonal rib;
(r) ridge rib; (w) wall rib

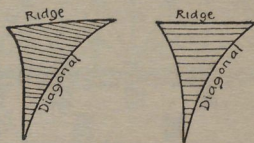


FIG. 261.
VAULTING SURFACES
Arrangement of courses

In large churches the bays of the aisles are generally nearly square, while the nave, being about twice as wide, has oblong bays about twice as wide as they are long (fig. 259, 1). And so sometimes two bays of the nave are included under one square vault (fig. 259, 2). In this case an additional groin is used, similar to the diagonals but crossing the building at right angles. The bay has, therefore, three groins instead of two dividing it into six cells instead of four, and it is therefore called a sexpartite vault, the ordinary plan being

* See article thereon.

quadripartite. This kind is more common in France than in England.

Before the end of the thirteenth century the number of ribs was increased. Intermediate ribs are introduced between the diagonal and transverse and between the diagonal and wall (fig. 259, plans 3, 4 *a*). Now a pair of these ribs forms an arch which leans towards the

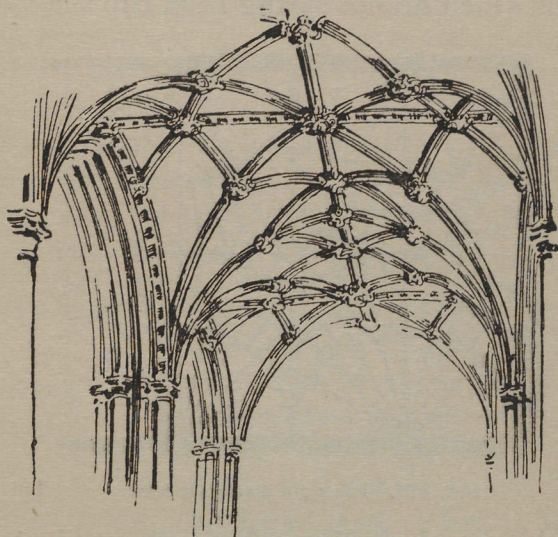


FIG. 262. LIERNE VAULTING

centre of the vault. It has therefore a tendency to fall in that direction. In order to counteract this a ridge rib (*b*) is placed between the apex of the inclined ribs and the centre of the vault. This ridge rib was afterwards extended to the extremity of the vault (*c*); but this continuation is of no structural use.

Early in the fourteenth century an important alteration is made in the curvature of the ribs. The curve of the diagonal rib approximates to the ellipse which would be formed by the intersection of two cylindrical spandrel surfaces of regular form. This change makes a considerable difference in the appearance of the vault.

The ploughshare form is also abandoned. Thus the form of the vault approximates more to a series of intersecting cylinders. The courses of the spandrel-filling are now made horizontal, so that they are parallel with the ridge (fig. 261).

About the middle of the fourteenth century a further modification is made by the introduction of *lierne* ribs, that is, ribs which do not spring from the shaft or wall,

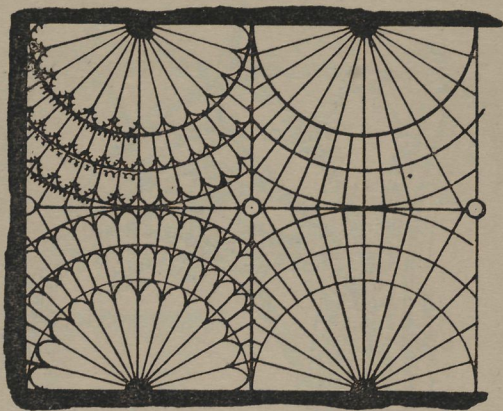


FIG. 263. PLAN OF FAN-VAULTING

but cross the spandrels from rib to rib, producing star-shaped patterns. This variety is known as *lierne* vaulting (fig. 259, plan 6, and fig. 262).

No further change of importance was made in the ordinary vault. But in the fifteenth century a new form known as fan-vaulting was developed and was frequently used, especially in diminutive work, though the ordinary groined vault continued to be the more common. In this variety numerous ribs spread out at equal angles and with the same curve producing, when seen from below, a fan-like appearance (fig. 263).

The character of any vault is determined by considering the form of the mass of masonry above any one shaft. In the early vaults one of these masses

forms, roughly, an inverted half-pyramid with concave sides, and a plan taken through it gives a parallelogram. The angles of the half-pyramid were gradually rounded off by altering the curve of the groins so as to make them less prominent. In fan-vaulting the bundle of ribs forms an inverted half-cone with concave sides, and its plan is a semicircle. It is this which gives to fan-vaulting its distinctive character. The method of construction was also different. In a groined vault the ribs are true arches; they were built first independently of the spandrels which were filled in afterwards and rested on the ribs. In the fan-vault the ribs and spandrels are one; there is a complication of ribs, but they are mere ornaments worked on the surface of the cone. Towards the close of the fifteenth century fan-vaulting achieved some remarkable developments, such as at Christ Church, Oxford; Henry VII.'s Chapel, Westminster; and St. George's Chapel, Windsor.

Renaissance vaults followed those of the Romans, that is, they were groined vaults formed by intersecting barrels and had no ribs. The centre of each bay was sometimes formed into a low saucer-shaped dome.

VARANDAH, VERANDAH, VERANDA (Portuguese). A slightly-built *loggia* or portico for sitting under; strictly a covered balcony (s.). Introduced into England early in the nineteenth century.

VAULTING SHAFT. A shaft placed against a wall to carry vaulting.

VERGE-BOARD. *See* BARGE-BOARD.

VESICA PISCIS (Lat., a fish's bladder). A name given by Albert Dürer (p.) to a pointed oval form used frequently in the middle ages as an aureole or glory round the figure of Our Lord or of the Virgin in sculpture, pictures, glass and seals.

VESTIBULE. A porch, entrance-hall, lobby, ante-chamber.

VESTRY, REVESTRY, SACRISTY. A room attached to a church in which to keep and put on vestments. It was commonly on the north side of the chancel in medieval times. (*See* SACRISTY.)

VILLA (Lat. *villa*, a farm-house, lit. small village—s.). A detached suburban house. Among the Romans a country-seat.

WISE, VICE. An old term for a spiral staircase round a column called a newel. It is sometimes of wood but generally of stone.

VITRUVIAN SCROLL. An ornament consisting of a series of spirals somewhat resembling waves.

VOLUTE. A spiral; the distinguishing feature of the Ionic capital, surviving in early Norman capitals. Seldom or never used in the middle ages. (*See* ORDER.)

VOUSSOIR. One of the stones or bricks forming an arch.

WAGGON-VAULT OR CEILING. *See* ROOF VAULT.

WAINSCOT (from Old Dutch *waeghe-schot*, wall-boarding—s.). (1) Wood panelling on a wall. (2) Oak imported from the Baltic; originally for making panelling but now used for other purposes.

WALL-PLATE. A piece of timber lying on a wall to receive the ends of rafters or joists.

WARD. *See* CASTLE.

WARMING-HOUSE. *See* CALEFACTORY.

WATER-TABLE. *See* WEATHERING.

WEATHERING OR WATER-TABLE. A sloping surface covering an off-set or projection of a wall or buttress to throw off the rain (fig. 264).

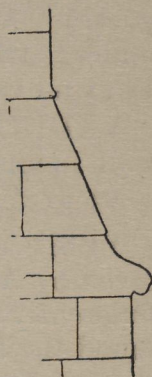


FIG. 264
WEATHERING OF
A BUTTRESS

WEATHER-BOARDING. Horizontal boards nailed on to the wall of a timber-framed building; the boards overlap and the upper edges are made thin so that they may fit more closely.

WEATHERCOCK. *See* VANE.

WEATHER-TILING. *See* TILE.

WICKET. A small door formed in a large one.

WIND-BEAM, WIND-BRACE. A diagonal strut in a roof from a principal rafter to a purlin to prevent the roof* from swaying longitudinally.

WINDOW. In the early middle ages when glass was expensive windows were small and frequently unglazed even in churches. Early windows (to about 1250) are rebated probably to receive a wooden frame which held the glass. In later times the glass was fixed into a groove in the wood or stonework. Windows which were not glazed were perhaps sometimes filled with horn or with a wooden lattice,* as those of butchers' shops in the country still are. All through the middle ages the glass was not made to open; the window was divided by a horizontal transom, the part above the transom being glazed and the part below fitted with iron bars and a wooden shutter. Subsequently (probably in the sixteenth century) the glass was fitted into iron casements. Sashes were introduced in the latter part of the seventeenth century. A 'Venetian' window is a triple window, the central division being wide and arched, while the side openings are narrow (generally one-third of the central part) and covered by an entablature. These have been in use since the time of Inigo Jones. (*See also* GLASS, TRACERY.)

ZIGZAG. A shallow Norman enrichment used chiefly on string-courses.

* See article thereon.

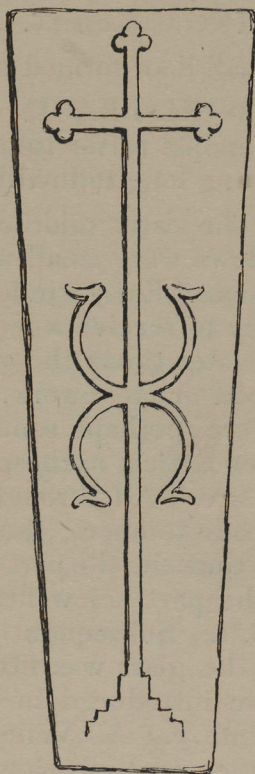


FIG. 265. COFFIN-LID
Thirteenth century

APPENDIXES

A LIST OF SAINTS

WHICH ARE MOST COMMONLY FOUND IN PAINTING AND SCULPTURE

WITH THE MANNER IN WHICH THEY ARE REPRESENTED

- St. Adrian : *d.* 290 ; anvil ; lion ; patron saint of Germany and Flanders and of soldiers ; protector from the plague.
- St. Agatha : *d.* 251 ; holding a dish containing her breasts ; pincers or shears.
- St. Agnes : *d.* 304 ; branch of olive, lamb, palm.
- St. Aidan : *d.* 651 ; Bishop ; evangelist of Northumbria ; a stag at his feet.
- St. Alban : *d.* 304 ? ; protomartyr of England ; sword ; fountain ; sometimes his head in his hand.
- St. Alphege : 954 ? - 1012 ; Archbishop of Canterbury ; his chasuble full of stones.
- St. Ambrose : 340 ? - 397 ; Bishop ; beehive, books, two human bones ; scourge.
- St. Andrew : Apostle ; a St. Andrew's cross.
- St. Anne : teaching the Virgin to read.
- St. Anthony : 251 - 356 ; Hermit ; a bell, sometimes hung from a crutch ; a hog ; fire near ; a T-cross on his shoulder.
- St. Antony of Padua : 1195 - 1231 ; Franciscan ; Infant Jesus in his arms or on a book ; flame in his hand or on his breast ; a mule kneeling.
- St. Apollonia : *d.* 250 ; pincers holding a tooth.
- St. Augustine of Hippo : 354 - 430 ; Bishop ; books, sometimes a heart, flaming or transfixed by a sword.
- St. Barbara : *d.* 303 ; patron of armourers ; cup and wafer, tower, feather, sword, crown.
- St. Barnabas : Apostle.
- St. Bartholomew : Apostle ; knife ; his skin held over his arm.

- St. Benedict : 480?-542? ; founder of Western monachism ; Benedictine habit ; a broken cup ; asperges or sprinkler ; a raven with a loaf in its beak ; a broken sieve.
- St. Bernard of Clairvaux : 1091-1153 ; beehive, inkhorn, pen, etc. ; sometimes a demon bound ; white habit ; three mitres.
- St. Blaise : *d.* 289 ; Bishop ; patron of woolcombers ; iron comb.
- St. Boniface : 680?-755 ; Archbishop, Benedictine ; book transfixed by a sword or stained with blood ; foot on prostrate tree.
- St. Botolph : *d.* 680 ; Abbot.
- St. Bridget of Sweden : *d.* 1373 ; founder of Order of Brigittines ; crozier ; pilgrim's staff ; red band across her forehead.
- St. Catherine of Alexandria : *d.* 307 ; patron of Venice and of places of education ; a wheel ; head of a man under her feet.
- St. Cecilia : *d.* 280 ; crown of roses ; musical instruments ; patron saint of music.
- St. Chad : *d.* 672 ; patron saint of Lichfield.
- St. Christopher : *d.* 364 ; carrying the Infant Jesus across a river.
- St. Chrysostom. *See* St. John Chrysostom.
- St. Clara : 1193-1253 ; founder of Order of Franciscan nuns ; cross, lily, pyx.
- St. Clement : 30?-100 ; an anchor ; Pope's or Bishop's robes.
- St. Constantine : 272?-337 ; Emperor ; holds the Labarum or standard bearing the Greek letters X P.
- St. Cosmo and St. Damian : *d.* 301 ; always together ; red robes ; surgical instruments ; patrons of medicine.
- St. Cuthbert : *d.* 687 ; Bishop ; an otter by his side ; patron saint of Durham.
- St. Denis : first century ; Bishop ; patron saint of France ; carries his own head.
- St. Dominic : 1170-1221 ; founder of Dominican Order ; black and white habit ; black and white dogs ('*Domini canes*') with torches in their mouths ; star on forehead ; lily.
- St. Dorothy : *d.* 303 ; crown of roses or holding roses in her hand.
- St. Dunstan : 924-988 ; Archbishop of Canterbury ; carrying a harp.
- St. Edith of Wilton : 962?-984 ; washing a beggar's feet.
- St. Edmund : 841-870 ; King and martyr ; an arrow, sometimes piercing a crown ; a wolf near, or a wolf guarding his head.
- St. Edward : *d.* 1066 ; King and Confessor ; royal robes ; sceptre surmounted by a dove ; a ring.

- St. Edward : 963?-978 ; King and martyr.
- St. Egidio. *See* St. Giles.
- St. Eloy, Lo, or Eligius : *d.* 659 ; Bishop ; patron of Bologna and of blacksmiths ; an anvil.
- St. Etheldreda : 630?-679 ; nun's habit, crowned ; building a church ; asleep under a tree ; patron saint of Ely.
- St. Faith : *d.* 290 ; carries a bundle of rods.
- St. Francis of Assisi : 1182-1226 ; founder of the Franciscan Order ; the Stigmata or wounds of Christ ; lamb ; lily.
- St. Genevieve : *d.* 512 ; patron saint of Paris ; a distaff ; sheep ; sometimes a basket of loaves ; a candle lighted, a demon trying to blow it out with bellows.
- St. George : *d.* 303 ; patron saint of England, Germany and Venice, and of soldiers ; a dragon ; red cross on white ground on banner or on breast ; white horse.
- St. Giles or Egidius : *d.* 725 ; an arrow piercing his breast or through his hand ; or a hind near, pierced by an arrow ; patron saint of Edinburgh, of cripples, etc.
- St. Gregory the Great : 544?-604 ; Pope's robes ; dove on his shoulder or hovering over his head.
- St. Guthlac : 663?-714 ; patron saint of Crowland.
- St. Hubert : *d.* 727 ; Bishop ; patron of the chase ; stag with crucifix between its horns.
- St. Hugh of Lincoln : 1135-1200 ; Bishop ; Carthusian habit ; swan ; three flowers.
- St. Hugh of Lincoln : 1246?-1255 ; boy-martyr.
- St. Ignatius Loyola : 1491-1556 ; founder of Society of Jesuits ; heart crowned with thorns ; I.H.S. in the sky.
- St. Ives or Yvo : *d.* 1303 ; patron saint of lawyers ; lawyer's robes ; sometimes surrounded by widows and orphans.
- St. James the Great : Apostle ; patron of Spain ; staff, bottle, scallop-shell.
- St. James the Less : Apostle ; a fuller's staff or club.
- St. Jerome : 345-420 ; in his study, or in the desert ; a cardinal's hat, a lion, a partridge.
- St. Joachim : father of the Virgin ; meeting St. Anna at the gate ; carries a staff and a basket containing two doves.
- St. John Baptist : a lamb ; a tall staff with a cross-piece ; hairy coat.
- St. John de Matha : *d.* 1213 ; founder of the Order of Trinitarians for the redemption of captives ; white habit, with blue and red cross on breast ; fetters, or angel leading captives.

- St. John : Evangelist ; eagle ; cup with serpent.
St. Joseph : a lily.
St. Jude : Apostle ; a halberd.
St. Laurence : *d.* 258 ; a gridiron.
St. Louis (IX) : 1215-1270 ; King of France ; royal robes, crown and sceptre or Franciscan habit ; crown of thorns.
St. Luke : Evangelist ; an ox ; a picture of the Virgin.
St. Margaret : *d.* 306 ; a dragon.
St. Mark : Evangelist ; lion ; pen, ink and scroll.
St. Martha of Bethany : patron of housewives and cooks ; keys at her girdle ; pot of holy water ; ladle ; dragon bound at her feet.
St. Martin of Tours : *d.* 397 ; beggar at his feet or receiving half his cloak.
St. Mary, the Blessed Virgin : a lily.
St. Mary Magdalene : patron of penitent women ; box or vase of alabaster ; long hair.
St. Matthew : an angel or man ; pen, ink and scroll ; bag of money ; a knife or dagger.
St. Matthias : Apostle ; an axe.
St. Nicholas of Myra or Bari : *d.* 326 ; Bishop ; ship ; anchor ; sometimes with three balls ; or three children in a tub ; patron saint of Russia, of sailors and children, and others.
St. Norbert : 1092?-1134 ; founder of Order of Premonstratensians ; white habit over black ; demon bound at his feet ; monstrance or cup, spider over it.
St. Oswald : 605?-642 ; King ; royal robes, large cross.
St. Paul : Apostle ; sword.
St. Peter : Apostle ; keys ; fish.
St. Peter Martyr : *d.* 1252 ; Dominican ; a wound in the head.
St. Philip : Apostle ; a cross, sometimes T-shaped.
St. Radegunda : 519?-587 ; captive kneeling at her feet ; broken fetters in her hand.
St. Roch : *d.* 1327 ; points to a wound in his leg ; pilgrim's staff and shell ; dog by his side.
St. Sebastian : *d.* 288 ; bound to a tree or column and pierced with arrows.
St. Simon : Apostle ; a saw ; sometimes fishes.
St. Stephen : protomartyr ; deacon's robes ; a stone striking his head.
St. Swithin : *d.* 862 ; Bishop of Winchester.

- St. Theresa : *d.* 1582 ; an angel holding a flame-tipped arrow ; heart with I.H.S. ; sometimes a crucifix, a lily or a dove ; patron saint of Spain.
- St. Thomas : Apostle ; patron of builders and architects ; a builder's square.
- St. Thomas Aquinas : 1224?–1274 ; Dominican ; chalice, star in his breast.
- St. Thomas à Becket : 1119?–1170 ; Archbishop ; Benedictine ; a wound in the head.
- St. Ursula : a banner with a red cross, sometimes surrounded by many virgins ; patron saint of young girls.
- St. Veronica : holding a cloth on which is the face of Our Lord.
- St. Vitus : *d.* 303 ; a cauldron of oil ; a boy with a palm ; generally a cock, sometimes a lion or wolf.
- St. William of Norwich : 1132–1144 ; depicted as being crucified by Jews.

THE FOUR FATHERS OF THE LATIN CHURCH

SS. Ambrose, Augustine, Gregory, Jerome.

THE FOUR FATHERS OF THE GREEK CHURCH

SS. Gregory Nazianzen, John Chrysostom, Basil the Great, Athanasius ; a fifth is sometimes added, namely St. Cyril of Alexandria.

THE ARCHANGELS

Gabriel, the angel of the Annunciation.

Michael : the angel of the Resurrection, receives and weighs the souls of the departed, hence has scales.

Raphael : the angel who brought the tidings to the shepherds.

For much of the matter in this list I am indebted to *Saints and their Symbols*, by E. A. G. (2nd ed., Lond., 1882).

A LIST OF ENGLISH ARCHITECTS

- Henry Hawthorne, *fl. temp.* Qu. Elizabeth; Surveyor to the Queen; gallery at Windsor Castle.
- John Shute, *fl.* 1550–1570, architect and limner; wrote *The First and Chief Groundes of Architecture*.
- John Thorpe, *fl.* 1570–c. 1610, surveyor; Longford Castle, Wilts.
- Huntingdon Smithson, *d.* 1648, surveyor; Wollaton Hall, Notts.
- Thomas Holt, 1578?–1624, carpenter; Oxford: Wadham College.
- Ralph Symonds, *fl.* 1600, builder; Cambridge: Trinity College Hall.
- Bernard Jansen, *fl.* 1610–1630, architect?; Audley End, Essex.
- John Westley, *d.* 1656, bricklayer; and Thomas Grumbald, mason; Cambridge: Clare College, east and south ranges and bridge.
- Inigo Jones, 1573–1652, architect; London: Banqueting House, Whitehall.
- John Abel, 1597–1694, carpenter; Leominster, Herefordshire: Market Hall (now “The Grange”).
- John Webb, 1611–1672, architect; Ashdown Park, Berkshire.
- Sir Christopher Wren, 1632–1723, architect; London: St. Paul’s Cathedral.
- Robert Hooke; 1635–1703, astronomer, etc.; London: Bethlehem Hospital.
- William Talman, *d.* 1700, architect; Chatsworth House, Derbyshire.
- Henry Aldrich, 1647–1710, Dean of Christchurch, Oxford; Oxford: Peckwater Quadrangle, Christchurch.
- Henry Bell, *d.* 1717, architect; King’s Lynn, Norfolk: Customs House.
- George Clark, 1660–1736, statesman (Secretary of State for War, etc.); Oxford: Christchurch Library.
- Sir John Vanbrugh, 1664–1726, dramatist and architect; Blenheim Palace, Oxfordshire.

- Colin Campbell, *d.* 1734, architect; Houghton House, Norfolk.
- Nicholas Hawkesmoor, 1666–1736, architect; London: St. George's Church, Bloomsbury.
- Thomas Archer, *d.* 1743, architect; Birmingham: St. Philip's Church.
- John James, *d.* 1746, architect; London: St. George's Church, Hanover Square.
- William Kent, 1684–1748, architect; London: Horse Guards.
- Giacomo Leoni, 1686–1746, architect; Moor Park, Hertfordshire.
- James Gibbs, 1682–1754, architect; London: St. Martin's-in-the-Fields (Trafalgar Square).
- Thomas Ripley, *d.* 1758, architect; London: The Admiralty.
- Sir James Borough, 1690–1764, Master of Gonville and Caius College, Cambridge; worked with James Essex, architect; Cambridge: Clare College Chapel.
- Earl of Burlington, 1695–1753, amateur; worked with Campbell, Kent, Leoni, Flitcroft.
- Henry Flitcroft, 1697–1769, architect; Woburn Abbey, Bedfordshire.
- George Dance, senior, 1698–1768, architect; London: Mansion House.
- Isaac Ware, *d.* 1766, architect; London: Chesterfield House.
- William Adam, *fl.* 1750, architect; buildings in Edinburgh and Glasgow.
- John Wood, senior, 1705?–1754, architect; Prior Park, Bath.
- Stephen Wright, *fl.* 1750, architect; Cambridge: University Library, east front.
- John Vardy, *d.* 1765, architect; London: Spencer House.
- James Paine, *c.* 1720–1789, architect; Kedleston Hall, Derbyshire.
- Sir Robert Taylor, 1714–1788, architect; London: stone buildings, Lincoln's Inn Fields.
- John Carr, 1723–1807, architect; Harewood House, Yorkshire.
- James Essex, 1722–1784, architect; buildings at Cambridge.
- Sir William Chambers, 1726–1796, architect; London: Somerset House.
- Robert Adam, 1728–1792, architect; Luton House, Bedfordshire.
- Thomas Cooley, 1740–1784, architect; Royal Exchange, Dublin.
- George Dance, junior, 1741–1825, architect; London, St. Luke's Hospital, Old Street.

- Thomas Harrison, 1744–1829, architect; buildings in Lancashire.
- Henry Holland, 1746?–1806, architect; London: Brooks's Club.
- James Gandon, 1742–1823; architect; Dublin: Customs House.
- James Wyatt, 1746–1813, architect; Fonthill Abbey.
- Sir John Soane, 1752–1836, architect; London: Bank of England.
- John Nash, 1752–1835, architect; London: Buckingham Palace.
- William Inwood, 1771–1843, architect; London: St. Pancras Church, Marylebone.
- Sir Jeffery Wyatville, 1766–1840, architect; Windsor Castle, alterations (Gothic).
- Thomas Rickman, 1776–1841, architect; writer on Gothic architecture; Cambridge: St. John's College, new court.
- William Wilkins, 1778–1839, architect; London: National Gallery.
- Sir John Smirke, 1781–1867, architect; London: British Museum.
- Charles Robert Cockerell, 1788–1863, architect; Oxford: Taylorian Institute.
- George Basevi, 1794–1845, architect; Cambridge: Fitzwilliam Museum.
- Sir William Tite, 1798–1873, architect; London: Royal Exchange.
- Sir Charles Barry, 1795–1860, architect; London: Houses of Parliament.
- Decimus Burton, 1800–1881, architect; London: Athenæum Club, Pall Mall.
- Sir George Gilbert Scott, 1811–1877, architect; London: St. Mary Abbot's Church, Kensington.
- Harvey Lonsdale Elmes, 1813–1847, architect; Liverpool: St. George's Hall.
- George Edmund Street, 1824–1881, architect; London: Law Courts.

A TABLE OF THE PERIODS OF ENGLISH ARCHITECTURE

	Rickman.	Sharpe.
William I. . . . 1066	Norman 1066-1189	Saxon to 1066
William II. . . . 1087		Norman
Henry I. . . . 1100		1066-1145
Stephen 1135		
Henry II. . . . 1154	Early English 1189-1280	Transition 1145-1190
Richard I. . . . 1189		Lancet
John 1199		1190-1245
Henry III. . . . 1216		
Edward I. . . . 1272	Decorated 1280-1377	Geometrical
Edward II. . . . 1307		1245-1315
Edward III. . . . 1327	Perpendicular 1377-1547	Curvilinear 1315-1360
Richard II. . . . 1377		Perpendicular
Henry IV. . . . 1399		1360-1550
Henry V. . . . 1413		
Henry VI. . . . 1422		
Edward IV. . . . 1461		
Edward V. . . . 1483		
Richard III. . . . 1483		
Henry VII. . . . 1485		
Henry VIII. . . . 1509		
Edward VI. . . . 1547	Tudor 1500-1603	
Mary 1553	Stuart 1603-1689	
Elizabeth 1558		
James I. . . . 1603		
Charles I. . . . 1625		
Commonwealth 1649	Hanoverian 1689-1800	
Charles II. . . . 1661		
James II. . . . 1685		
William and Mary 1689		
Anne 1702	Revived styles 1800-	
George I. . . . 1714		
George II. . . . 1727		
George III. . . . 1760		
George IV. . . . 1820		
William IV. . . . 1830		
Victoria 1837		
Edward VII. . . . 1900		

A TABLE OF THE RELIGIOUS ORDERS IN ENGLAND AND WALES AT THE TIME
OF THE GENERAL SUPPRESSION BY HENRY VIII.

Name of Order.	Common name.	Founder.	When founded.	Rule, habit, etc. When introduced into England.	No. of houses sup- pressed.
MONKS AND NUNS: Benedictine . . .	Black Monks.	St. Benedict, at Monte Cassino, between Rome and Naples. Berno, at Cluny.	529	Black cape and hood over cassock of black, white, or russet, with white or black fur.	267
Cluniac . . .	.....	St. Bruno of Co- logne, at Chartreuse, near Grenoble.	910	Reformed Benedictines. All black. <i>c.</i> 1070.	32
Carthusian . . .	.....	St. Bruno of Co- logne, at Chartreuse, near Grenoble.	1086	No houses of women in Eng- land. Black cloak, white tunic. 1222.	8
Cistercian . . .	White Monks or grey Monks.	Robert, Bishop of Molême, and St. Stephen Harding, at Cîteaux, Dijon.	<i>c.</i> 1100	Reformed Benedictines. White cassock with small hood, with black scapulary. 1128.	100
Fontevraud . . .	.....	Robert d'Arbrissel at Fontevraud, Poitiers.	<i>c.</i> 1100	Double houses for men and women, ruled by Abbess. (No nuns in England?) 1161.	3
CANONS AND CANONESSES: Augustinian . . .	Black Canons.	Probably at Avig- non.	<i>c.</i> 1100	Black cloak and hood over white tunic. <i>c.</i> 1108.	170
Præmonstratensian . . .	White Canons.	St. Norbert, at Pré- montré, Picardy.	1119	Reformed Augustinians. Long white cloak and hood over white cassock; white cap. 1140.	34

Gilbertine	.....	St. Gilbert of Sempringham, at Sempringham, Lincolnshire.	c. 1139	The only English order. Double houses for men and women, ruled by Abbess. Men, white cloak over black cassock. Women, black cloak, hood, and tunic.	26
FRIARS AND NUNS: Franciscan	Grey Friars or Friars Minors.	St. Francis, at Assisi.	1210	Grey cloak and hood, grey cassock. 1224.	66
Dominican	Black Friars or Preaching Friars.	St. Dominic, at Bologna.	1215	Black cloak and hood over white tunic, square black cap. 1221.	58
Augustinian	Austin Friars.	Amalgamated by Pope Clement IV.	1265	No houses of women in England. Long black gown, with wide sleeves and hood; white cassock. 1250.	32
Carmelite.	White Friars.	Albert of Jerusalem, at Mount Carmel.	1209?	White cloak over brown tunic. 1240.	40
St. Clare	Poor Clares or Minoresses.	St. Francis and St. Clara, at Assisi.	1212	Franciscan nuns. 1293.	3
De Penitencia	Friars of the Sack	.....	...	Gown like a sack. 1257.	7
Trinitarians	.....	St. John of Matha.	c. 1197	White, red, or blue cross. 1244.	11
Bonhommes	.....	.....	c. 1250	Rule of St. Augustine. Blue. 1257.	2
Crossed Friars.	Crutched Friars.	.....	c. 1169	Red cross on white habit. 1244.	6
MILITARY ORDERS: Hospitaliers	.....	Gerard of Jerusalem.	1092	Black mantle, with eight-pointed white cross. 1100	54
[Templars]	Hugh de Payens, at Jerusalem.	1118	White mantle with red cross; c. 1140. Suppressed 1310.	24?

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